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*The* NORTH CENTRAL  
ASSOCIATION  
QUARTERLY

Spiritual World Foundations

Physical Sciences and World Citizenship

Guidance and World Citizenship

Controversial Educational Issues

Summary of Annual Reports, 1946-47



# THE NORTH CENTRAL ASSOCIATION QUARTERLY

*The Official Organ of the North Central Association of Colleges  
and Secondary Schools*

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The North Central Association Quarterly is published by the North Central Association of Colleges and Secondary Schools on the first day of July, October, January, and April. It is the official organ of the Association, and contains the proceedings of the annual meeting of the Association, together with much additional material directly related to the work of the Association. The regular subscription price is \$3.00 a year. The July number is priced at \$1.25; the others, 75 cents each. All members of the Association—institutional and individual—are entitled to receive the Quarterly as part of their annual fees. A special subscription price of \$2.50 per year is permitted to school libraries, college libraries, and public libraries and to individuals connected with North Central Association membership institutions.

Publication Office: The George Banta Publishing Company,  
Menasha, Wisconsin.

Executive and Editorial Office: 4012 University High School  
Building, Ann Arbor, Michigan.

Entered as Second-Class matter at the Post Office at Menasha,  
Wisconsin, under the Act of August 24, 1912. Acceptance for mail-  
ing at the special rate of postage provided for in Section 1103,  
Act of October 3, 1917, authorized March 8, 1919.



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# THE NORTH CENTRAL ASSOCIATION QUARTERLY

*Volume XXII*

JANUARY 1948

*Number 3*

## ASSOCIATION NOTES AND EDITORIAL COMMENTS

### SOMETHING DIFFERENT IN HIGH- SCHOOL-COLLEGE RELATIONS

IN 1945 the Michigan College Association and the Michigan Association of Secondary Schools, on invitation of the former, jointly elected a cooperative committee on staggered terms of office and charged it to study problems of mutual concern to the parent bodies. The philosophy back of this action is that the customary recriminations have long since petered out, and that nothing constructive can flow from the perpetuation of the hollow myth that each is obstructive of progress by the other. So, as just stated, the joint committee came into being and for two years has been taking the long view of public education as a continuum, certainly from the elementary school through college, if not from grade one.

It was inevitable, of course, that the time-honored matter of college admission should claim immediate attention. After long and, it is rumored, arduous debate, it was decided that a proposition should be referred to the two associations whereby schools which would qualify under certain general provisions might have their graduates admitted to college without the usual four sequences. (These sequences entail two majors of three units each and two minors of two units each selected from the five academic areas, namely,

English, social studies, languages, laboratory sciences, and mathematics, with five additional units in elective fields.)

The precedent for this proposal lies in the Michigan Study of the Secondary School Curriculum which was vigorously prosecuted from 1937 to 1945. One of the basic features of that study was a similar release for the fifty-five participating high schools which had membership in that undertaking. The difference, if any, is that the 1937 agreement was tacitly for the duration of the study, whereas the current arrangement has no such limitation; however, the achievements of the member schools will be reviewed at the discretion of the executive committee (the "Committee on the New College Agreement") and those which fail to show constructive results may be dropped from the approved list.

Both the Michigan College Association and the Michigan Secondary School Association naturally gave the proposed innovation their close attention. It was clear from the beginning that the members of the former would not be unanimous in regard to the matter. Although in the end there were no dissenting votes, the colleges of Michigan ranged from enthusiastic acceptance to cautious reservations in affixing their signatures to the new agreement.

Since the plan had to be implemented, as already indicated a joint executive committee was appointed. Four members were drawn from each association and one from the Department of Public Instruction. This committee was instructed to formulate criteria for the selection of schools and to take such other action as might be required to get the agreement under way. As this is being written, fifty-two schools—forty-three of which are on the North Central list—ranging in size and type from a small, isolated school in the cut-over lands of the Upper Peninsula to the large high schools of Detroit have subscribed to the following provisions and therefore have been approved:

1. A program involving the building of an adequate personal file about each student, including test data of various kinds, anecdotal records, personality inventories, achievement samples, and the like. The high school staff must assume the responsibility for developing a summary of these data for submission to the colleges to which their graduates apply for admission.

2. A basic curriculum study and evaluation of the purposes and program of the secondary school.

3. Procedures for continuous follow-up of former students.

4. A continuous program of information and orientation throughout the high school course regarding the nature and requirements of certain occupations and specialized college courses. During the senior year, special emphasis, is to be placed on the occupational connotations of the college of the student's choice.

It is obvious that this plan will fail if the signatories, both or either, falter in their determination to make it work. Its implications are not limited by the geographical boundaries of Michigan; hence it is being briefly described here. Already it has attracted the attention of educational organizations outside the state. It deserves the attention of thoughtful educators everywhere.

HARLAN C. KOCH, Editor

## FIELD NOTES

### Colorado

At the annual Accreditation Breakfast held in Denver, Colorado, April 12, 1947, Mr. A. C. Cross, retiring as Chairman of the Colorado State Committee, was presented a beautiful gold wrist watch in honor of his seventeen years of service to Colorado high schools. This was the gift of the administrators of schools accredited by the North Central Association. Presentation was made by Mr. Robert James, Principal of the Grand Junction Junior-Senior High School. Mr. Cross is now Director of the Extension Division of the University of Colorado.

Anticipating the new emphasis placed upon the school library, the Bureau of High School Visitation of the University of Colorado has published a bulletin, *A Manual for the High School Teacher-Librarian and Her Staff*. This was written by Mary Louise Lyda of the University Library and deals with specific policies and procedures which are essential to effective library service. It is finding much use among high schools in Colorado.

Initiated this year was the publication of an annual report to member schools of the Association in Colorado. This is to be used in emphasizing the values of accreditation, in presenting information about the Association to member schools, and in a public relations program. As a part of this report, each year all member schools will be furnished with data for publication in local newspapers. It is also intended that state educational journals will be used to give publicity to the accreditation program.

Efforts are now under way to renew use of the *Evaluative Criteria* in the study of North Central Association schools. Several schools which are members of the Association are now



working on the self-evaluation phase, and two schools are employing the *Criteria* in working toward accreditation.

### *Indiana*

The biggest problem faced by the Indiana State Committee was to deal with the Evansville situation. The students of three of the city high schools had gone out on strike in April, 1946, because of a feud between a board member and one of the basketball coaches. Members of the State Committee visited Evansville and interviewed parents, board members, and students. Since this was the second time that the State Committee had had occasion to investigate troubles in Evansville, the State Committee recommended to the Association that all four Evansville high schools be advised on Criterion 6. The Association approved the recommendation. In the letter to the Board of Education the mayor was advised to use a screening method of selection of board members so as to avoid any criticism that politics entered into the appointment. The mayor went through the formality of using the services of a screening committee, but reappointed the incumbent, around whom so much of the controversy had raged. The State Committee held a special meeting on July 24 and told the Evansville Board of School Trustees that the Committee would recommend to the Association at the 1948 annual meeting that the four Evansville high schools be dropped from membership in the Association because of political interference in the appointment of a school board member. "If, however, the city of Evansville can show conclusively that politics has not entered the situation, the Committee is willing to recommend a clean bill of health." In the meantime, the newly reappointed member de-

clined to take office. The screening committee then really went to work. After mature deliberations it recommended the names of four capable women, from whose number the mayor made an excellent appointment. On October 7, 1947, the State Committee sent a letter to the Board of School Trustees to the effect that it would unanimously recommend a clean bill of health for the city high schools, since the new appointment to the Board was a non-political one. The Committee advised that future appointments might well follow the same pattern.

The above actions of the Indiana State Committee were followed with great interest all over the state, since a most important principle was involved. The schoolmen of the state felt that the outcome would have a most salutary effect upon future possible violations of Criterion 6.

The annual summer meeting of the member principals was held on the Indiana University Campus August 15 and 16, 1947. There was a total attendance of eighty-seven. There were three sessions. The first session was devoted to a review of last year's annual report blanks. Each principal was given the report blank and all the correspondence that pertained to it so that he might ask questions on any phase of it. The next two sessions were spent on examining and studying the 1947-48 report forms. Proof that the meeting was a successful one is that the reports that have come in this fall have been in better shape than usual.

The State Committee is again conducting an enrollment study. The report form was developed at the summer conference.

### *Wyoming*

For the past few years a valuable point of contact has been had between

the Wyoming State Committee and the Wyoming Association of Secondary-School Principals by virtue of the fact that the President of the latter organization is also a member of the State Committee of the N.C.A. It has become possible, as a direct result of this arrangement, to secure greater observation of Criterion 10b by schools not in the N.C.A. than could otherwise be secured.

WE ARE SORRY, MR. BRAMELD

New York University  
School of Education  
New York 3, N.Y.  
November 25, 1947

Mr. Harlan C. Koch, Managing Editor  
The NORTH CENTRAL ASSOCIATION QUARTERLY  
4012 University High School Building  
Ann Arbor, Michigan

Dear Mr. Koch:

Anyone who has ever had the experience of reading a stenographic reproduction of an extemporaneous talk will sympathize with my astonishment and acute chagrin in receiving the October issue of the NORTH CENTRAL ASSOCIATION QUARTERLY. There I found a stenotyped report of my extemporaneous talk at the Chicago meeting last spring.

In my entire experience, I have never before known an academic journal to proceed with the publication of such a report without having given the author any opportunity whatever to check for errors, to modify awkward phraseology or to read proof. The article as published is not only unauthorized, but it contains misspellings and misunderstood words and phrases. For example, there is no Superintendent Voxland: I was referring, of course, to Superintendent Goslin of Minneapolis.

Under these circumstances, I feel that some official correction is called for, which will be called to the attention of the entire Association. I should wish to insist upon at least publication of this letter in full.

Sincerely, yours,  
THEODORE BRAMELD  
Professor, Educational Philosophy

The editor suspects that neither Mr. Brameld nor his readers are interested in the urgencies which led to the publi-

cation of his excellent address in the form to which he objects. No one regrets more than the editor any embarrassment which may have been caused by this event. Under these circumstances we willingly publish his letter.

#### HIGH SCHOOL DIPLOMAS FOR DISABLED VETERANS THROUGH CORRESPONDENCE COURSES

Twenty thousand ill and disabled patients in Veterans Administration hospitals are studying correspondence courses ranging from high-school English, mathematics and history to book-keeping, farming and carpentry. A number of communities cooperate with VA hospitals in helping patients qualify for high-school diplomas. Veteran-students in the VA tuberculosis hospital in Sunmount, N. Y., are carried on the rolls of the local high school, and may take New York State Regents examinations when they complete their studies. The Los Angeles, Calif., school system furnishes teachers for patients studying high-school subjects in nearby VA hospitals. The Brecksville, Ohio, post of the Veterans of Foreign Wars awards a yearly scholarship of \$500 to the outstanding student-patient in the hospital there.

#### FEDERAL CITIZENS COMMITTEE TAKES STAND ON ISSUES

The Citizens Federal Committee on Education consists of national civic leaders from every walk of American life, broadly representing the "consumers" of American education. In its two-day November meeting at the United States Office of Education, the Committee, in addition to approving the progress report on improvement of school conditions, considered such broad national problems as relations of the Federal Government to education and the question of how to encourage



more capable young people to enter the teaching profession.

Printed copies of the complete report by the Sub-Committee on the Teacher in America are now available.

Those who attended the Citizens Federal Committee meeting were:

*Representing Agriculture:* Lloyd Halvorson, National Grange; J. D. Parel, American Farm Bureau Federation

*Representing Homemakers:* Mrs. Mildred White Wells and Mrs. Sally Claggett, General Federation of Women's Clubs; Miss Agnes

NATION'S ALL-TIME HIGH COLLEGE-  
UNIVERSITY ENROLLMENT FIGURES  
RELEASED BY U. S. OFFICE  
OF EDUCATION

College and university enrollments reached almost 2,300,000 during the fall of 1947, according to the annual enrollment survey of the U. S. Office of Education, Federal Security Agency. Returns from substantially all of the Nation's 1,778 institutions of higher education reveal an enrollment ap-

ENROLLMENTS REPORTED IN CURRENT U.S. OFFICE OF EDUCATION SURVEY

Type of Institution	Fall 1946	Fall 1947	Increase	
			Amount	Percent
Universities, colleges and professional schools	1,681,055	1,842,811	161,756	9.62
Teachers Colleges and normal schools	150,059	169,356	19,297	12.86
Junior colleges	188,139	213,436	25,297	13.45
Negro institutions	58,842	73,904	15,062	25.60
Total	2,078,095	2,299,507	221,412	10.65

Samuelson, National Congress of Parents and Teachers; Kathryn McHale, American Association of University Women

*Representing Veterans:* Walter C. Hess, Disabled American Veterans; Walter G. Ingalls, American Legion; Rev. Frank Tishkins, Veterans of Foreign Wars

*Representing Negro Groups:* J. L. Horace, Jr., National Fraternal Council of Negro Churches; Mrs. Estelle Massey Osborne, National Council of Negro Women; P. B. Young, Sr., National Negro Newspaper Publishers Association

*Representing Religious Groups:* Father William E. McManus, National Catholic Welfare Conference; Dr. F. Ernest Johnson, Federal Council of the Churches of Christ in America

*Representing Labor:* John T. Corbett, Brotherhood of Locomotive Engineers; Frank Fernback, Congress of Industrial Organizations

*Representing Business:* Thomas C. Boushall, Chamber of Commerce of the United States

*Representing the Professions:* Ralph L. Goetzenberger, Engineers' Council for Professional Development

*Representing Manufacturing:* J. McDonald Comer, National Association of Manufacturers

proximately a million higher than the peak pre-war registration.

Federal Security Administrator Oscar R. Ewing, commenting on the survey and release of the enrollment figures today said, "Peak enrollment in our universities and colleges necessarily produces peak problems administratively and educationally. This study should give college and university officials, as well as State and local educators and planners, the type of basic data they need to map required action."

In announcing results of the survey, Dr. John W. Studebaker, U.S. Commissioner of Education, said, "The continued increase in higher education enrollments, up 11 percent this fall over the fall of 1946, means that our colleges and universities are going a long way toward making up the national deficit

in trained manpower caused by the drawing off of college-age youth during the period of the war."

According to Dr. John Dale Russell, Director of the U. S. Office of Education's Division of Higher Education, "The fears that institutions of higher education would not be able to accommodate the increased enrollment are not borne out. Substantial increases over 1946 are shown in all groups of institutions. Enrollment in universities, separate liberal arts colleges, and professional schools has gone up 10 percent. Enrollment in teachers' colleges and normal schools is up almost 13 percent. The rise in junior college enrollment is 14 percent. The most striking increase is found in the Negro institutions which report an increase of 26 percent."

The Office of Education survey was designed to secure enrollment data from all types of institutions of higher education in the United States, both public and private. For statistics on any given state, write to the Division of Higher Education, U. S. Office of Education, Washington 25, D.C.

#### THE CONTROVERSY OVER UNIVERSAL MILITARY TRAINING

Neither the friends nor foes of universal military training are slackening their efforts to promote their points of view. In Washington, the National Security Committee was created by 50 national organizations on October 24. Former Supreme Court associate justice Owen J. Roberts heads the group. First official act of the new Committee was to announce that four college presidents endorse UMT. The Committee said that they are James Conant, Harvard; Edmund Day, Cornell; Charles Seymour, Yale; and Donald Tressider, Stanford.

President Hutchins, of the University of Chicago, issued a statement

soon after the Committee's formation. He said: "UMT is extremely unpopular among educators. The campaign for UMT will be a dismal failure, unless a great hysteria is whipped up for war." Dr. Hutchins added that the "so-called public opinion polls which claim that UMT is wanted by the people are framed so that they do not reveal what the people are really thinking."

#### ANOTHER CALL FOR HELP FROM U.S. INFORMATION CENTERS

The Military Government now operates twenty-one U.S. Information Centers in Germany; four in Austria; three in Japan; and four in Korea. They are "eagerly patronized by young and old."

The Army says there is a great need for printed materials for these Centers, including textbooks on teacher training. Send for a circular entitled "Printed Materials for Occupied Areas," dated October 20, 1947, which gives procedures for sending textbooks and magazines for these Centers or see the July, 1947 issue of the *QUARTERLY*, pp. 2-5, where similar information is printed.

#### CONTRIBUTORS TO THIS ISSUE

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## THE SPIRITUAL FOUNDATIONS OF A COOPERATIVE WORLD<sup>1</sup>

ALBERT B. COE  
*Oak Park, Illinois*

It is an honor to stand here in the place that was to have been occupied by my friend, Bishop Oxnham. As you know, he is one of our national leaders by virtue of his connection with the Federal Council and of the Commission on a Just and Durable Peace.

I am to take his subject, "The Spiritual Foundations of a Cooperative World": In Paris, last June, my wife and I with four other Americans had the privilege of making an appointment with Nicholas Berdyaev, the great Russian, who for twenty-five years has been living and writing in that city. He is the one who wrote "The Fate of Man in the Modern World," "The End of Our Time," "Freedom and Reality in the Spirit," and other stimulating books.

Dr. Berdyaev was an interesting man to see. He had the pallor of a scholar. I could not tell his age from his appearance, whether he was sixty or seventy-five. He could be either. He came into the room with a velvet beret on his head, a cape, his hair reaching to his shoulders, and cotton in his ears to protect him from the windy cold of the outside. He removed his beret, he removed his cape, he removed the cotton from his ears, he gave the nervous twitch about his mouth that is his misfortune, and then he began to speak.

He said, "The human spirit grew up in another kind of a world, a very simple world. Today we are in a complicated world due largely to the development of science and the movement of the masses. We are not prepared for a world like this. We are

overwhelmed by it. Our spirituality is not adequate. As a result, the tendency is to de-spiritualize when we need more spirituality. Only by a new spirituality can we be saved."

That was the substance of his talk to us, that we must have, in a world of advancing science and the movement of the masses, a new spirituality and a new emphasis upon that spirituality.

Is there a need for a new spirituality? One need only travel about this world today to find that Dr. Berdyaev is a wise prophet.

Our recent journey took us not only to India but to Iraq and Palestine, Egypt, Syria, Turkey, Greece, Italy, France, and England. Everywhere we went we found the need of a new spirituality, not forgetting the need of a new spirituality in our own home, the United States of America. We found the need of this spirituality in India. There we found poverty the like of which we never dreamed. One cannot know the poverty of India unless he sees it. We found 85 percent of the people of India illiterate, unable even to read and write. We found the length of life in India only twenty-seven years. If the land were scientifically cultivated, I believe the length of life could approach that of the people of the United States.

The saddest feature of India is not in its poverty, not in its illiteracy, but in the fact that although the white man has been in India for many years, he is looked upon with a large question mark by the Indian People. The Indian people resent it that the white man has looked down upon the dark man all through the years.

<sup>1</sup> Delivered before the third general session of the Association in Chicago, March 28, 1947.



One afternoon in Madura, when a strike was on in the Indian Royal Navy, a missionary said, "I was insulted for the first time in a crowd. I heard the words 'Quit India, white dog!' I don't blame them. The arrogance of the white man is at last coming back upon him. I do not blame the Indian."

When we find in India large and stylish clubs with a sign outside, "No Indian Permitted," there is a suggestion of the arrogance of the white man in a land whose culture goes back five-thousand years. I am reminded of the words of Tillak, the great hymn writer in India, who, resenting the arrogance of the white man, called out these words: "Quit you! Get you gone, you whom the land India pleaseth not! Think not that money or authority can save us. 'Tis a false and vain conceit. Come, let us knit the bonds of brotherhood!"

There is bitterness in India, and in the midst of that bitterness, resulting from the attitude of the white race to the dark race, I found the need of a new spirituality. I found it also in Turkey. Turkey is advancing, becoming more like the West, aping the West in almost every material field, taking the fez from the heads of the men that they may not look different from the westerner, taking the veil from the women that they may not look different from western women, sending their students (many of them) to American institutions that they may become experts in the crafts and in the sciences as we are experts in them. They copy the West in almost every material field, but neglect our spiritual emphasis.

Of course it is understandable that in removing the caliphate, the dominating power of the Mohammedan Church that had them in their grip for four hundred years, they felt that to be fair they must refuse admission to the

teachings of the Christian faith. But again the sad feature is that they ape us in our materialism and forget us in our spiritual emphasis. Yes, there is need in Turkey of a new spirituality.

There is need in Greece of a new spirituality. There is need in Palestine, about which I shall speak in a moment, of a new spirituality. We find all over that world no honor in youth, little or no honor in age, little or no honor in government. There is need—a tremendous need—of a new spirituality.

Dr. Berdyaev was right. He has seen what we all feel. In a world of advancing science and of the movement of the masses we need a new spirituality.

What is it that keeps us from having this new spirituality? Our emphasis upon power keeps us from the new spirituality. Dr. Rall, of Garrett Biblical Institute, has told us that man is distinguished from the beast in two ways: The beast will always be a beast, but man has an "ought" and a "can."

We have developed our "can," we have developed our power, we have developed our material influence. We need only to travel through this world to realize that we have developed our "can" even in the greatness of our educational institutions.

When I studied at Cambridge University a few years ago I remember that one of my professors said something that was both complimentary and critical about our education. This was his remark, made before the second World War:

"How many people in England receive a college education? One in a thousand. How many in France? One in eight hundred. How many in Germany? One in seven hundred. How many in the United States? One in three hundred—such as they are." I accepted the dig with good grace.

The truth of the matter is that we have superior educational institutions.

When we look over the United States and notice that in 150 years we have made the advance that we have made in educational institutions, we are amazed and so is the world. We have developed our "can" in our educational setup. We have developed our "can" in the agricultural field.

When we visit far countries and return to this country, particularly the Middle West, we look at the black soil and know that it is cultivated scientifically. Therefore it is the bread basket of the world.

We have developed our "can." No country in the world can compare with us—and we say it humbly—in the sweep of our educational system, in our agricultural development, in our medical science, in our sanitation.

But the difficulty is, in developing our "can" we have failed to develop our "ought." The poet says, "Man's inhumanity to man makes countless thousands mourn." The sociologist tells us that too many Christians hate Jews, and too many white people look down on black people. The historian frequently wraps the developments of history around wars, when perhaps he ought to be wrapping the developments of history around something far more constructive. We have failed to develop our "ought," and that is one reason why we have not developed the new spirituality in an age of developing science and in an age of the movement of the masses.

There is still another deterrent to spirituality: prosperity. Van Loon wrote that the successful man of Boston was one who had both his green peas and his lobster on the 4th of July. That served as the end-all and be-all of success. Prosperity as a god stands in the way of spiritual development.

Another deterrent to spirituality is the humanistic idea that man can improve himself.

What can we do? Admitting that there are negatives in all of our lives that keep us from the new spirituality, let us proceed to say that there are some fields in which we can find this new spirituality.

The first field is that of knowledge. If we are to have world citizenship—and we are all deeply interested in it—we must have knowledge.

I have a friend who teaches geography. The more I hear her talk of geography, the more I comprehend the vastness of the study of geography and how little the masses of people in this country know about geography—the bare facts of geography. What is in the earth? What is the population of the earth? What is the shape of the earth?

Also, we need to know economics. It is disturbing to find the economic ignorance that exists among the masses of our people. We need to know our economics, how many raw materials are in the earth, what country needs the raw materials. We have heard it said that in India there are no raw materials. That is erroneous. Any economist who studies India knows there are vast resources in the soil of India, and there are vast resources in the soil of many countries, resources not yet discovered. People need to know the facts about raw materials, but more than that, they should know how interdependent the nations are in their economic needs.

Again we must know more about physiology. During the war, when we had our blood banks, it was one of the disgraces of our nation—a disgrace in the field of common knowledge—that white people would not permit their sons to be given blood which came from the Negro race, when everyone in the world of scholarship has told us that it makes no difference whatever. We need that kind of common knowledge.

But there is a deeper knowledge



necessary. It is this deeper knowledge that we must have if we are to build a cooperative world. Lawrence Hyde, a British theologian, wrote such stimulating books as *The Learned Knife* and *The Progress of Humanism*. In the latter book he said, "Never before have we been so incredibly well informed and yet so fatally lacking in wisdom."

I turn to Dr. Aubrey, the President of Crossier Seminary. In his book, *Developing Theological Tendencies*, he writes: "The spiritual leadership of society is spiritually weak. Therein lies the modern dilemma."

We require general knowledge, but the knowledge we most need is a deeper one, a knowledge of the spirit.

I found as I traveled around this troubled world that Great Britain is thoroughly disliked. In some places the United States is thoroughly disliked. I am not eager to hold up any nation to castigation, but I am simply stating this fact. I found that Great Britain is thoroughly disliked, even hated, in Egypt, thoroughly disliked in Iraq, thoroughly disliked officially in India, and in many other countries.

When I arrived in this country I entered into a discussion one evening with a well-known man from Great Britain. In the course of the discussion one person said, "Isn't Great Britain losing prestige around the Mediterranean?" And the answer came back, "Oh, no, Britain is not losing prestige around the Mediterranean—Britain is gaining in prestige."

We were utterly confounded by that statement. It was evident, in our estimation, that they were losing prestige, yet the representative of Britain said they were gaining prestige. Then I asked the question, "What is your comprehension of prestige?" My comprehension of prestige was in popularity and confidence. His conception of prestige was military might!

Is that what we are to have in the world of the future? Is that what we are doing to build confidence in the future? Is prestige military might? I ask you! What chance have we for new spirituality with that conception of prestige?

I come now to Palestine. I have always been interested in Zionism, deeply interested in it. I may say further that no one in this room has suffered more in his spirit than I over the beatings and killings that my Jewish friends have taken in Europe. I bow to no one in deep sympathy for the Jews, but I ask: How can anyone, going into Palestine and spending even a few weeks, come away, after talking with college presidents, with members of the American Consular Service, with Arabs and with Jews, and say that it is right for Jews from Europe to be forced into Palestine today?

There wasn't a college president, up and down the Mediterranean coast, including the president of the American University in Cairo, the president of Beirut, the head of the college at Aleppo in Syria, who agreed that it was right for the Jews to be forced into Palestine at this time for two reasons: First, Palestine is an Arab world. We in America never get that side of the story. It is an Arab world. True, my Jewish friends have done wonderful things there. They are better farmers, better scientists than the Arabs. The Arab is slower, but hasn't he a right in his way to be slow? Second, how can anyone, knowing the blood bath that is before them, knowingly take these poor, defeated Jewish people out of Europe and thrust them into that land?

We asked repeatedly, "Why is America in on this? Why is it suggested that one hundred thousand Jews from Europe go to Palestine, suggested by the United States of America?" We could not understand it. Is that our

way of solving a difficult problem? Must we take these troubled people and thrust them farther away from us upon another people of the world? Is that the answer?

I visited Beirut and talked to one of the saints of the world in the field of religion. His name is Dr. Lavonion. In his sweet and quiet way he said (we were in the midst of all the furor connected with the entrance of one hundred thousand Jews), "In the Old Testament there was a word called 'reconciliation,' but there seems to be in Palestine no one who is familiar with the word 'reconciliation.' "

What is the matter with us? We need spiritual knowledge, something deeper than ordinary knowledge, a deeper knowledge that will give us a nobler definition of prestige and a new understanding of reconciliation.

I come to the second point: Integrity. If one of the spiritual foundations of world citizenship is knowledge and deeper knowledge, then the next is integrity. I ask my American friends, "Where is our integrity?" Nehru in his book, *The Glimpses of World History*, says, "It is strange to think of the rebel Jesus preaching non-violence and revolt against the social order, and then compare Him with the loud voiced followers of today, with their imperialism and armaments and wars and worship of wealth; the Sermon on the Mount and modern American and European Christianity—how amazingly dissimilar they are!"

What are you going to do with that? Deny it? I am not. There is too much truth in it. It is boldly stated, but it is true. There is all too little consistency in our lives. We do not match our word and our deed. How can we have a new spirituality in the world when we are not accustomed to consistency between what we say and what we do?

Here is Greece. We have before us

the question of a large loan to Greece. I was in the first World War for two years, and our job then was to save the world for democracy. We came out of the war thinking we had saved the world for democracy. We closed the doors on everybody, came back to normalcy ourselves (or tried to), and stayed at home while the seeds of discord that we had left in Europe finally broke out into another war.

What did we do in this second world war? We were determined to do away with Fascism, and in order to do away with Fascism we lined up with Communism. Today, one year and a half after the close of the second World War, we are lining up with Fascist leadership in Greece against Communism. Where is our consistency? Why do we do these things? Where are we going? Are we forever to take a stand today and change that stand tomorrow? We cannot develop a new spirituality in that atmosphere.

I come now to the third and the final suggestion of a basis for a new spirituality in the world: Brotherhood.

The world, and our country in particular, needs to go back constantly to the words that are basic in our national life. "We hold these truths to be self-evident, that all men are created equal," and "Four score and seven years ago our fathers brought forth upon this continent a new nation, conceived in liberty and dedicated to the proposition that all men are created equal."

We need to go back to Woodrow Wilson, who in the course of his Fourteen Points made this statement: "We must be as eager to be just to the one to whom we do not wish to be just, as the one to whom we do wish to be just." That is the very essence of brotherhood.

It is my conviction (and I hope it is your conviction too) that you can



spend four hundred million dollars and you won't get any farther than you are now. You may spend eight hundred million dollars—you may spend one thousand six hundred million dollars, but you won't get any farther than you are now. The hope lies in a brotherhood for all the peoples of the world.

Too long have we heard the dark man claim that we look down upon him. Too long have we heard of the arrogance of the white man. We will not get a cooperative world unless we have that spirit of brotherhood.

Brotherhood isn't had in a vacuum. There is a demand in it, and I call for us in all of our educational work to accept the demand in bringing the world of brotherhood.

How are we going to do it? We must feed the hungry. I am Chairman of the Commission on War Victims and Reconstruction of my own denomination. We find that people are still aware of the poverty overseas, but we find that unless we keep them constantly reminded of it they forget.

I got off the train one night in Ahmadnagar, India and went to the mission house. On the train I had heard a European woman telling in rather loud tones that there was no famine in India, that there was very little poverty in India, that the Indian didn't need help, and then she said, "This emphasis upon poverty is made by the Congress Party to embarrass the British government."

I was there to learn. I listened and made no comment. Later I entered the mission house. In the quiet of the evening, when we were reading, the wife of the missionary said, "Joe, four girls and one teacher fainted in the school today."

He looked over his paper and said, "Did you find out the reason?"

"Oh, yes," she said, "Not one of the five had had food for five days."

That is the story of India. That is the story of Greece. Thank God for the good work of UNRRA in Greece. However unsatisfactory it may have been in other countries of the world UNRRA sent food where it was supposed to go in Greece.

In Italy I visited school buildings that had been bombed by the American army in their pursuit of the Germans. I entered these dilapidated buildings where the Sisters were carrying on the schools with limited food, with no facilities, sleeping on bare boards. I wanted to help. I still want to help.

I went to France and sat down at a table. There I found that the food I was eating had been sent to France in packages from unknown people in America. I began with oatmeal soup from a package of oatmeal from an unknown friend. The only food we had in between the soup and the dessert was canned meat and boiled potatoes. The meat came from three different unknown givers from America. For dessert we ate cream of wheat. That condition prevails today.

I received a letter recently saying, "Don't let Mr. X come to France; there isn't enough food here." One can buy on the black market in Paris, but the masses of people cannot pay black market prices.

I went to England. I suffered with the English people because of their deprivations. However we may disapprove of the British Empire, we can't help but love the English people. They are wonderful. Today they do not have enough clothes. They do not have a variety of food. It is true that their factories are running, but they are trying to develop their trade. For that reason they are exporting. They are trying to return to a normal life.

Today we must do everything within our power to send food to the hungry people of the world. It is necessary.

How can we ever have the confidence of the peoples of the far countries if we do not come to their relief now in food, in clothing, in the everyday needs of their lives?

Dr. Berdyaev, you are right. In a world of advancing science, in a world of the movement of the masses, we must have more spirituality—and a new spirituality. How may we have it?

By a deeper knowledge, a spiritualized knowledge. By more integrity, more honesty, more matching of our word and our deed. By greater emphasis upon brotherhood.

Hear this closing text. It is from Zechariah, the sixth chapter and the seventh verse: "Not by might nor by power, but by My Spirit, saith the Lord of Hosts."



## CONTRIBUTION OF THE PHYSICAL SCIENCES TO WORLD CITIZENSHIP<sup>1</sup>

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SOME thirty years ago it was my privilege to sit in the classes of Dr. Jordan of the University of Chicago, as a student in the field of bacteriology. In one of his lectures Dr. Jordan told us of an area in Africa that lies between the boundaries of the South Sahara and the Zambezi River, in which there exists a very virulent type of malaria. He went on to tell us that the incidence of malaria among the black peoples of that particular part of the world was so great that had the science of hematology (that is, the science of blood) developed in this particular area, the plasmodia of malaria would have been listed with the normal constituents of the blood, namely, the white corpuscles, the red, and the blood platelets.

That was a rather striking way to tell us of the very high incidence of this disease among a group of people a long way off. I know we were impressed with it at the time. The best evidence for that is that I still remember it as a dramatic statement. But it did not seem to concern us.

A few years ago airplanes traveling from this part of the world to Brazil brought some of those mosquitoes along, with the result that we had an outbreak of this very virulent form of malaria in Brazil, which immediately brought the government of Brazil and the Rockefeller Foundation into action.

As a result of the most carefully planned kind of warfare against these insects, that particular epidemic was stopped. We were tremendously in-

terested, of course, because mosquitoes could easily travel from Brazil to the United States and give us an outbreak of the same disease.

What I am trying to say to you is that thirty years ago one could sit in the classroom and listen with not too much concern about the incidence of a virulent disease in the heart of Africa, feeling quite comfortable in the fact that that disease would probably never reach our shores. But in view of the fact that the world has grown small, we can no longer sit and enjoy that complacency.

The science of nutrition has made tremendous progress in the last several years. Some of the great studies in the field of nutrition have concerned themselves with the field of proteins, those substances such as lean meat and the white of the egg, and cheese, and the gluten of wheat, and so on. When we first recognized that these substances were the tissue builders of the body, and when we first recognized that there was a certain amount of destruction of this tissue going on daily, we gave ourselves the problem of trying to find out what quantity of this material should be present in the diet.

As a result of studies that were carried out in Germany under Voight, and in our own country under Dr. Chittenden at Yale, we arrived at certain figures. The figure we arrived at was an interesting one because it indicated that the amount of protein necessary to maintain life on an adequate level of efficiency was very much smaller than what we had thought.

<sup>1</sup> Delivered before the second general session of the Association in Chicago, March 28, 1947.

We were disturbed, however, by the fact that as one reviewed the diet of peoples in various parts of the world it became very evident that those peoples who lived on a relatively small amount of protein (of the order that science seemed to think was about right) were the peoples who were highly susceptible to disease. And so, in spite of these figures for the maintenance of an individual, we were all rather skeptical about trying it because there seemed to be some relationship between the protein level of the diet and resistance to disease.

Since that time we have learned that proteins can be broken up into a group of substances called amino acids, that these building blocks which are formed in the digestive tract form the raw materials out of which the proteins in the body are built. We have learned also that those very interesting structures in the body, which we call the immune bodies, the substances which are responsible for resistance to disease, are protein in character and consequently are made up of these building blocks.

As a result of this we have had a very interesting series of experiments by Dr. Paul Cannon, who has shown that if you develop an immunity toward one or more diseases, for example, in rabbits, and then feed those animals on a relatively high protein diet, the immune bodies will remain intact and resistance to disease will remain at a high level for a long period of time. However, if the protein in the diet is of small quantity, then resistance to disease diminishes rather rapidly and the animal becomes susceptible.

The moral, of course, is very easy to see. The peoples of the world today in very large numbers are suffering from hunger. We are talking about diets of 1,500 calories; but when you talk of diets in terms of calories, you are merely talking about the number of

energy units that are necessary to do the mechanical work of the body.

A far more essential question is how much protein these people are getting. We know from the tremendous increase in such diseases as tuberculosis, for example, in the Italian area, and the growth of other diseases in other areas, that resistance to disease is definitely on the decrease. We are again realizing the truth of the statement that was made many, many years ago, that the incidence of tuberculosis rises and falls with the price of bread. Only today we perhaps should say with the availability of bread.

What I am trying to say to you is this: We can no longer neglect the nutritional status of peoples in other parts of the world, because as their nutritional status diminishes their susceptibility to disease increases, and the chances of these people carrying infection to us, because of the interchange of peoples in the travel we do today, becomes increasingly great.

The most significant factor today in the physical sciences which has to do with the problem of world citizenship is, of course, the problem of atomic energy. Science is the temple that is being built by the peoples of all nations. If you would know something about the atmosphere which you are breathing, you must get acquainted with Black of Scotland, Priestley of England, Scheele of Sweden, Lavoisier of France, and Avogadro of Italy. If you would know something about diabetes you must not only get acquainted with the workers in Europe and America, but you also will have to add to your list of acquaintances a great Chinese scientist by the name of Professor Wu.

As a result of the work of scientists in practically every part of the world, we have succeeded finally in unlocking the tremendous stores of energy which lie within the atoms. I should like to re-



view for you, very briefly, those particular steps.

At the turn of the century our picture of the atom was something of the nature of a billiard ball or a golf ball. We thought of it as a very hard and dense mass which could go through all of the vicissitudes of physical and chemical change without being altered in the slightest. We had to think of it in that way because we had learned to subscribe to one very fundamental law, the law of conservation of matter, which stated that matter could not be created, neither could it be destroyed.

With the discovery of radioactivity as exemplified in the discovery of radium by Madam Curie, we had to alter this picture of the atom, because radium turned out to be a substance quite similar, in a great many respects, to ordinary lead in its outward appearance, but differing from it in the fact that it was continually going to pieces, a certain percentage of its atoms going to pieces in every unit of time, that this process of going to pieces involved throwing off from the radium atom particles which we call alpha particles (and which turned out to be atoms of helium), with tremendous velocities—velocities, for example, approaching 10,000 miles per second.

That perhaps does not mean much to you, but if I tell you that that concentration of energy is 400 million times the concentration of the energy in steam, you will realize what a great discovery that was.

With the discovery of this high-speed particle being thrown off from radium at the turn of the century, scientists began to use this high-speed particle as a kind of atomic artillery, using it to batter the different elements to pieces, trying to get some notion of what they might be made up of.

In the meantime we had learned that the atom was not billiard-ball-like in

structure, but that it resembled a solar system with a central portion or "sun" or nucleus which was small and very dense and very hard, surrounded by "planets" of negative electricity. We had learned a great deal about the planetary system; we were anxious to know about this central nucleus, and one method of getting at this problem was to shoot at that nucleus with these high-speed particles in an attempt to bring about its disintegration.

We were successful in breaking down certain elements such as nitrogen, for example, which turned out to be made up of particles of hydrogen. We soon arrived, however, at a limit of this kind of attack. It then turned out that following some work which started in Germany, which in turn was followed by work by Chadwick in England, we made a very remarkable discovery. We discovered that if this so-called alpha particle from radium, which turned out to have a positive electrical charge on it, were allowed to bombard the element beryllium, an element which resembles aluminum in most of its properties, that you could knock out of this element beryllium a particle which had no electrical charge, which came out with a velocity of about 10,000 miles per second again, and which of course represented another type of atomic artillery.

Again scientists found a new playground for experimentation. We now had a sort of Rube Goldberg apparatus to play with. Alpha particles from radium bombarding beryllium, beryllium going to pieces and throwing off neutrons at 10,000 miles a second, the neutrons then being allowed to bombard the different elements.

Here we find that the French workers, Madame and Monsieur Joliot, the daughter and son-in-law of the great Pierre and Madame Curie, made some outstanding discoveries. In bombard-

ing even the ordinary elements, such as the elements in common salt, they discovered that if you bombarded these elements with neutrons, the neutron would apparently stick in the nucleus, in the central "sun," that the central "sun" became unstable and began to throw off particles in a fashion similar to radium. In other words, they discovered artificial radioactivity.

As a part of that kind of experimentation, Enrico Fermi in Italy thought it would be interesting to see what would happen if the heaviest of our elements, namely, uranium, was bombarded with this Rube Goldberg apparatus. He found that there was a decided shift in the properties of uranium, that it became more radioactive than it was, and hence he assumed that the neutron had stuck in the nucleus of the uranium atom, had increased its weight by one unit, and a new element had been formed. That turned out to be very largely correct.

In the meantime, however, we had learned through work of Dempster at the University of Chicago that all uranium atoms do not have the same weight, that the weights which have been recorded in the laboratories were average weights. It was Dempster's discovery that some of the atoms of uranium had a weight of 238, in fact 99.3 percent of them had that weight, that about 0.7 percent or slightly under that had a weight of 235, and a very much smaller percentage a weight of 234.

Obviously, then, it became a very interesting experiment to study the effect of this neutron on the different kinds of uranium atoms. And here, through the work of Otto Hahn in Germany and his very distinguished colleague, Liese Meitner, an amazing discovery was made. It was found eventually that when this neutron strikes the uranium atom having a

weight of 235, that uranium atom falls apart into roughly two halves, that these two halves which are the common elements, such as sulfur and iodine and krypton, and so on, are radioactive elements, behaving similar to radium, but that the interesting thing in connection with this falling apart or fissioning process was that tremendous quantities of energy were liberated and some matter actually destroyed.

That destruction of matter was most interesting, because back in 1905 Einstein had predicted that if we were ever able to destroy matter, energy would be liberated according to an equation which stated that the energy liberated would be equal to the weight of the matter destroyed multiplied by (and this is the amazing thing) the square of the velocity of light. Light moves with a velocity of 186,000 miles per second, to put it in very large units, and when you square that you get 35 million. Therefore, even though the amount of matter destroyed is small, the amount of energy liberated is enormous.

The storage battery which turns over the engine in your automobile operates at 6 volts. When TNT explodes it explodes with an energy intensity of 35 volts. When uranium atoms 235 fall apart they liberate energy with an intensity of 200 million volts!

A further discovery then came from our own country by this same Italian, Enrico Fermi, who discovered that when the atoms of uranium fall apart neutrons are liberated, and interestingly enough, while a single neutron may break a uranium atom in half, that uranium atom in falling apart liberates on the average two neutrons. Obviously, then, if these two neutrons just liberated were to strike other uranium atoms of the 235 variety, you might have two atoms of uranium falling



apart and, on the average, four neutrons liberated. If these four neutrons were to strike four other uranium atoms, they would fall apart liberating energy and you would have eight neutrons liberated. The next time, sixteen; then thirty-two, sixty-four, and then it goes up into very large figures.

Obviously, if the energy liberated in each one of these decompositions was of the order of 200 million electron-volts, and this process was multiplied, it would be obvious that soon you would arrive at a tremendous explosion.

The atomic bomb is that explosion. The atomic bomb of one variety is simply uranium 235 separated from the heavier uranium atoms, bombarded with neutrons, having enough uranium present so that the losses of neutrons will not be sufficient to stop the reaction. In other words, the situation is similar to a biological problem. On the average, every couple that grows to maturity has two children; that just maintains the population. If they have more than two children the population rises. If they have fewer than two children the population decreases.

So it is with the fissioning of uranium. If you have on the average more than one neutron liberated when the atom of uranium goes to pieces, then the reaction grows in intensity. If you have less than one on the average liberated, then the reaction of course subsides.

Another thing I want to make very clear at this point is that this is information that is open to the scientists of all the world. When I first spoke before the Trustees of the University of Chicago, shortly after the atomic bombs were dropped, in an effort to get them interested in developing the Institute of Nuclear Physics, one of the Trustees said, "Now, Mr. Gustavson, we would like to have you tell us just

what part of what you have said we must keep a secret." Of course the answer was, "If it were secret material I wouldn't have given it to you in the first place, and in the second place everything that I have said to you is published in the *Encyclopedia Britannica*, which, gentlemen, is your own publication." As far as I know, the *Encyclopedia Britannica* is not a secret document.

As far as fundamental principles are concerned, there are no secrets of the atomic bomb. The secrets which we have concerning it are secrets that are concerned with the technological phases of it. For example, in the separation of the uranium atoms 235 from 238—I shall not discuss the 238 atom because that is not a part of our problem today—you convert the uranium to uranium fluoride. That is a very toxic substance. We know a great many technological secrets on how to handle the fluorine.

Uranium fluoride is a very corrosive substance; it is gaseous in character, and we know how to make pumps that will handle it. We know a thousand and one secrets of that character, but those secrets are not secrets that someone else cannot discover. We discovered them in the course of about three years, and anyone else who makes an intelligent effort can discover the same kind of information.

Fortunately, or unfortunately, when you knock at Nature's door and ask her a question, she doesn't say, "Who is there? Are you a Russian? a Scandinavian? an Englishman? Are you black? Are you white? Are you Catholic? Are you Protestant?" She only demands one thing, and that is that you frame the question in a very definite manner so that she can give you an answer. If you frame the question properly she answers you in the same way, regardless of your nationality.

That is a very important thing to remember, because that means that anyone who makes the effort that we make can discover the same fundamental facts that we discovered.

With the result of building the atomic bomb, the war of course was brought to a dramatic close. A new type of warfare had been initiated. Civilians by the thousands had been killed. Civilians by the thousands had been injured by the tremendous heat of the blast, and by the radioactive substances liberated when the uranium atoms fell apart. The temperature of the atomic bomb, as near as one can calculate—estimate, perhaps I should say—is of the order of 70 million degrees. That is many times the temperature of the sun.

At eight o'clock on the morning of the day the bomb fell on Hiroshima, some 120,000 youngsters were facing east carrying out their gymnastic exercises in the schools of that city. Those youngsters were burned in varying degrees by the tremendous heat of the blast. A great many of those youngsters today have so-called keloid scars which rise from an inch to an inch and a half above the normal tissue and which if removed merely grow back again. Something has changed in the fundamental character of their whole physical matrix, because if you injure these youngsters in any part of their body now, that same type of keloid tissue develops.

We know something of the tremendous number of people killed. We know the damage that will exist for years to come. We are saying to each other today, "Let us hope and pray and let us do everything that is humanly possible to avert a war where atomic bombs shall come into general use."

Did you know that after the atomic bomb was exploded in Bikini, that within one week the radioactive sub-

stances in small quantities arrived at the coast of California? Does that say anything to you? To Edward Teller, one of the workers on the atomic bomb, it says, "If you were to explode a sufficiently large number of atomic bombs west of California, not even striking the coast and if the wind were to bring the radioactive substances over the country, you could kill tremendous numbers of people by the radioactive disintegrations themselves." That is why science is saying over and over again that an atomic war means the destruction of civilization.

I have tried to give you a few illustrations of the work of science which is driving us to be good citizens. What I have said up to this point can be summarized in a very short sentence. It says this to the human race: "Be good or be damned!"

I should like to take the remaining few minutes at my disposal to speak of another phase of the problem. The human race, throughout the long stretch of history, has faced the problem of finding something to eat, of finding adequate housing, of being able to protect itself from the elements and from disease. We found ourselves in a world where apparently the raw materials for solving those problems were limited. There was a limited number of caves, and hence men fought to occupy them. There has been a limited amount of sodium nitrate in the world hence nations have struggled to control the nitrate deposits of Chile. There seemingly is a limited amount of iron ore in the world, and nations have fought over that. They have fought over the world's supply of oil, also.

We have had a tremendous competitive struggle which has had as its basis the fact that the world's resources were apparently limited. This limited supply of resources, not uniformly distributed over the world, gave



rise to the great struggles which we know of in the history of our economic development, resulting periodically in war.

Today, as a result of the work in the sciences, we need not think of the world's resources as limited. We can think of them perhaps almost as unlimited. The nitrate deposits of Chile, for example, which were once the object of control of any nation that went to war, were also the basic raw material for the manufacture of fertilizer. Now they are of no significance because, thanks to the work of Haber and others whom I could mention, today we can take the unlimited nitrogen of the air and make nitrates in unlimited quantities. And so anyone who wants to make the effort can have all of the nitrate fertilizer that the world demands, all of the nitrates for all of the explosives necessary to blast tunnels through the mountains, to build roads, to do the many things in peace time that explosives can do.

Today we know how to take even the raw materials of the world, such as wood pulp, and convert them into sugar, and on that sugar grow yeast which will contain as much as 40 percent protein. A good beefsteak, if you can get it, contains about 25 percent. That yeast material, having 40 percent of protein in it, has a taste in frying that is similar to lamb chops. This was the kind of material that the Scandinavians ate in large quantities during the war because their food supply was limited.

In future we need not think forever of the complex problem of growing our crops and putting them into the farm animals, and from the farm animals getting our beefsteak. There are much more efficient ways of growing food-stuffs with microorganisms which give us materials which are just as nutritious, and perhaps even more so, and

whose taste is all that the human race can demand.

Today we can take the soft brown coals and convert them into gasoline. During the war we learned to take the ocean water and from it extract magnesium in unlimited quantities. While the amount of aluminum in the form of bauxite may be limited, the amount of aluminum in the form of clay and feldspar is practically unlimited. Today methods have been arrived at by which we can extract aluminum from clay.

What I am trying to say to you is this: Physical science today has developed to a point where technology can take care of all of the needs of mankind; in other words, the struggle which grows out of a limited supply of natural resources is no longer necessary.

Can it be accomplished? That is the question which human beings have to decide, not on the basis of technology, not on the basis of raw materials, but on the basis of social attitudes—on the basis of social morality, if you will. Every discovery that man has made offers him two opportunities: He can use it to destroy, or he can use it to conserve and to save. That is true of the knife which may be used to stab a neighbor in the back, or which, placed in the hands of a surgeon, becomes the instrument of mercy and helpfulness.

And so if you take carbolic acid from coal tar and treat it with nitric acid to make picric acid out of it, you can make a beautiful yellow dyestuff for silk and wool; you can make a medicine to relieve the extreme pain of burns; you can make an explosive that will blast man from the face of the earth.

I am trying to summarize what I have said in this way: The only hope for the world, as I see it at any rate, is for us to become citizens of the world.

There are two great forces pushing us on: First, the great destructive capacity which has come along with scientific development, which says, "Be good or be damned!" And second, a great force that is creative in char-

acter, which says that man can have the good life if he will learn to create and not to destroy; if he can learn, in other words, to have a decent social morality—if he can become a world citizen.



## PROMOTING WORLD CITIZENSHIP IN SCHOOL AND COLLEGE THROUGH EFFECTIVE GUIDANCE PRACTICES<sup>1</sup>

CLIFFORD E. ERICKSON  
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I look at this program with a great deal of consternation. I noticed the very broad general topic, "Promoting World Citizenship," and then the highly specific topic, "Through Effective Guidance Practices," and I wondered how one person can bridge the gap between those two widely divergent themes.

All of you engaged in public school activities recognize, I am sure, the tremendous growth within the last few years of this thing we call "Guidance and Personnel Work." You have seen the impetus in business and industry. You have seen the tremendous interest in guidance by the armed services. You have seen the outcome of such studies as "Education for All American Youth." Guidance is rapidly moving from a promotional and conversational stage into one where sane and effective implementation becomes necessary. Most of you, I am sure, are acquainted with a recent meeting of the state superintendents of public instruction. One of their recommendations was the development of adequate and effective guidance services. The recent meetings of the Central States Association of Colleges and Secondary Schools established guidance as one of nine criteria for the accreditation of secondary schools. They passed the following recommendation: "Each school should have organized a coordinated guidance service to aid people in meeting educational, moral, health, civic and personal problems. . . ."

In our own state we are beginning the implementation of a plan called "The College Agreement" whereby high schools, in cooperation with the colleges of the state, can now establish different kinds of training patterns in high school which will be accepted for college entrance. It will be essential that adequate counseling programs be available to youngsters and that ample information be made available to the colleges these pupils plan to enter.

I am sure that most of you are also aware of the fact that for the first time federal and state funds are available for counselor training and for reimbursement of counselors at the local level. Through the so-called George-Barden Act it is now possible for counselors to be provided through state and federal reimbursement arrangements. All of those activities are only indications of trends that have been taking place for a long time. They represent the crystallization of a number of movements which are now leading to the point where the implementation of an effective guidance program becomes one of the administrator's responsibilities. The importance of that responsibility is growing because school administrators generally are beginning to recognize that through the guidance program the entire school offering can be reenergized. The prime service of a guidance program is represented by the contributions it might make to all of the school services.

The guidance program might make such contributions as these: Helping boys and girls to learn about them-

<sup>1</sup> Delivered before the Commission on Research and Service in Chicago, March 27, 1947.

selves, in order that every youngster, as he goes through school, might begin to acquire an increasing amount of accurate information about his own abilities, his interests, his problems, his plans, and his own frustrations. Every youngster should have that body of information about himself which makes it possible for him to plan intelligently. The relevance of school tasks to an individual youngster depends upon the information that he has about himself and how he sees that information in relationship to his own personal plans.

The guidance program can also help the entire school program by helping the staff learn about the pupils that they are expected to work with. Increasingly, I think we are utilizing the guidance program as a way to study boys and girls. This information is then made available to all of the staff members of the school. In other words, information about boys and girls must be organized, synthesized and boiled down and this information made available to all of the school staff coming in contact with these youngsters.

The guidance program is assuming other responsibilities. More and more attention is being given to curriculum reorganization. This reorganization should be based upon the characteristics of the students; their needs, problems, interests, plans, and opportunities. The guidance program is becoming a research agency of the faculty to gather the information needed to provide a basis for curricular improvement.

A recent survey of one school of 1,400 pupils revealed a large number of conflicts and frustrations. These 1,400 youngsters had more than 1,252 different kinds of problems with which they wanted help. Of those 1,252 problems, more than 1,150 were difficulties that the youngsters hoped the school might be able to help them with. We are be-

ginning to assume the responsibility of helping boys and girls learn how to solve their problems and improve their planning for the future. Those two-fold responsibilities are becoming an inherent part of the school's responsibility. However, a guidance program ought to extend these services by making available to every youngster those kinds of placement services that help him bridge the gap to the next situation.

It is also necessary to consider the importance of follow-up services and follow-up studies which will help youngsters even after they have left school. Such follow-up studies provide a means for evaluating the effectiveness of our own teaching. In no other way can we so accurately determine the efficiency of our work and at the same time learn about the problems youth face after leaving school.

However, as we talk about world citizenship, we move into a much more general and certainly a much more inclusive area. We might represent the contribution of guidance services to world citizenship by the following illustration. Effective world citizenship might be represented by a placid pool of water. A pebble thrown into the pool causes an inner circle which represents the adjustment of the individual to himself. The guidance program makes its first contribution to self-adjustment. No one can be effective in world citizenship unless first of all, he has harmonized his own difficulties and his own problems. We are first of all concerned with helping every youngster to learn how to live with himself. He must learn how to live with himself by first gaining information about himself. He must learn how to live with himself by gaining information about the responsibilities that he will have to meet on the outside. We should make available to him that kind of information which will



help him learn about the outside world. We help him attain this self-adjustment by working with him in such a way that he learns how to solve his own difficulties and learns how to make his own plans in a more intelligent way.

The second circle in this little pool of water might be represented by an individual's adjustment to his immediate social groups. There again, the guidance program is tremendously interested in the social circle in which every youngster operates. His social relationships are of the greatest importance. The school must be interested in the kind of harmony that exists in these social groups. It must be interested in helping him to develop those kinds of social skills, those kinds of relationships which will help him operate effectively as a member of many kinds of social organizations.

However, if we are thinking about world citizenship, we would see another circle in this pool. An individual's adjustment to his school, to his community, and to the larger social organizations within his environment are important. The guidance program is concerned with helping every youngster learn how to plan his own school program. In planning his own school program he has to have information about the curriculum. He has to have information about what that curriculum means in terms of possible school experiences. He has to have information about himself in relation to that curriculum and he needs a tremendous amount of help in thinking through the effects of different kinds of curricular experiences. The pupil also needs to have an opportunity to understand the educational resources within that community outside of the school. He needs to know about occupational opportunities in that community. He needs to know about resources in that community that are available to help

people with problems. He needs to know the kind of personality and social skills that an individual must have if he is going to be successful when he moves from the school out into that community, and he needs to know many kinds of techniques of job getting. He needs to know many techniques of interviewing and how to write letters of application and many similar skills.

As a pupil moves from his school and community out into a larger world, we provide those kinds of experiences and that kind of information which will make him a more effective member of the nation and of the world. Here again, unless he has attained an adjustment to himself and an adjustment to those intimate social groups in which he has participated, and unless he has learned the technique of solving his own problems; unless he has learned how to plan his own future more intelligently, he isn't going to be a very useful member of society.

School administrators are concerned with the problems of implementation of their guidance programs. How can they be most effective as administrators? Should the entire staff participate? Do we need people with special interests and training? These are the kinds of questions of concern to every school principal or superintendent.

There is no substitute for competent administration. No one else can take away from the administrator the responsibility for developing an adequate program. The appointment of a director of guidance or another official of similar title will not remove from the administrator his job of personal responsibility and personal supervision of what happens in the guidance program. If we are going to have effective guidance services for youngsters, they must be planned and they must be organized. Those services do not

happen by accident. Many present day guidance services are more conversational and paper programs than anything else.

The job of individual counseling is a task that requires special abilities, special skills and special interests which all members of a school staff do not have. Individual counseling is just as distinctive an activity and requires abilities that are just as different as the coach of a good team or the teacher of art. Therefore, if we are going to have an effective program, it needs to be organized, first of all, in terms of the tasks to be done and then we need to find the kinds of people who will fit those tasks. They must have the abilities, the training and the interests to carry on those responsibilities in a competent manner.

If a guidance program is going to be implemented it will be relatively ineffective unless the administrator provides some kind of in-service training activity to help teachers and counselors and principals get started on these new responsibilities. It is essential that this in-service stimulation be planned as an integral part of the development.

Studies indicate that in almost every community, large or small, wealthy or poor, parents and employers are sufficiently interested in having guidance services provided for their youngsters to see that the necessary finances are available. If parents know that we are interested in helping pupils learn about themselves, acquire educational and occupational information, provide competent counseling for all pupils, assist in the placement of pupils; they will willingly support our schools.

The guidance program recognizes

the human desire for independence and self-regulation. Therefore, every effort must be made to help pupils acquire the skills and information needed to regulate themselves. Most pupils have the power, the resources and the talents to take care of their own problems. They need help from some one in identifying their resources and in organizing and mobilizing those resources for the solution of their own difficulties.

Every youngster who leaves school ought to have these services available: First, a careful, systematic study of himself with that information interpreted back to him so that as he leaves he is intelligent and literate about his own characteristics.

Secondly, every youngster should have adequate information about what he is going to meet as he takes the next step; the problems he is going to run into, the situations he is going to have to face, and the alternatives that will be available.

Thirdly, every youngster ought to have had competent, individual counseling. He should have received assistance in analyzing and dealing with his personal problems. He should be more able to plan his own future. He should have increasing appreciation of his interests and abilities. He should have increased understanding of the techniques and skills by which he can use those talents and resources. He should have a clearer picture of the world into which he is going and the problems that he has to face and the kinds of skills and techniques that he needs in order to face those problems. Any school can do at least that much, and no school can afford to do less than that for every youngster in the school program.



## OPINIONS ON SELECTED CONTROVERSIAL EDUCATIONAL ISSUES

J. B. EDMONSON  
*University of Michigan*

ABOUT twenty years ago the writer organized the "Rump Convention," which was designed primarily for those who did not have responsibilities on the commissions and the committees of the North Central Association of Colleges and Secondary Schools. The meetings were informally organized and emphasis was placed on the exchange of opinions on issues in secondary education. In recent years the so-called "Rump Convention" has acquired a more dignified position at the annual meeting of the Association, and it is called the Principals' Conference, the recent sessions of which have been of great interest to secondary school men as well as to college representatives.

At the meeting of the Principals' Conference held on Thursday evening, March 27, 1947, a unique program was provided. Five vital issues were presented and those in attendance were given an opportunity to express their frank opinions on ballots that had been prepared for that purpose. Each of the speakers presented his opinions on an issue of his own choice, and the members of the audience were then given the opportunity to record on these ballots their approval, disapproval, or recommended modifications of the speaker's views. After the Conference

each speaker was furnished with the ballots relating to his topic, with the recommendation that a summary of the returns be included in the paper to be prepared for publication in the *QUARTERLY*.

The plan used at this year's Conference aroused a marked degree of interest on the part of the audience as it provided for a maximum degree of participation. The writer, who presided as chairman, is greatly indebted to the five participants on the program as well as to the many persons who took part in the informal discussion and contributed opinions on the ballots. The speaker's opinions as expressed at the Conference, together with some account of the views of the audience, are presented in the series of five articles which immediately follows.

The participants were Messrs. George Carrothers, of the University of Michigan; John Guy Fowlkes, of the University of Wisconsin; Charles M. Sanford, of the University of Illinois; Ralph W. Tyler, of the University of Chicago; and Francis W. Bacon, of the Evanston Township High School, Evanston, Illinois. The issues which these respective speakers presented are listed on the ballot which the members of the audience used and which appears on the following page.

## BALLOT

## ON SELECTED CONTROVERSIAL ISSUES ON SECONDARY EDUCATION

DIRECTIONS: Please check the replies that best express your opinion. Questions, comments, or explanations will be appreciated.—J. B. EDMONSON

*Issue One:* "Should a High School Principal Be Expected to Recommend Students for College Admission?" GEORGE CARROTHERS

(a) I endorse Carrothers' views .....

(c) No opinion on the issue .....

(b) I am opposed to Carrothers' views .....

(d) I would modify Carrothers' views as follows .....

*Issue Two:* "What Should Be the Administrative Jurisdiction of Junior Colleges?" JOHN GUY FOWLKES

(a) I endorse Fowlkes' views .....

(c) No opinion on the issue .....

(b) I am opposed to Fowlkes' views .....

(d) I would modify Fowlkes' views as follows .....

*Issue Three:* "Are Home Rooms in Most Schools a Waste of Time?" CHARLES W. SANFORD

(a) I endorse Sanford's views .....

(c) No opinion on the issue .....

(b) I am opposed to Sanford's views .....

(d) I would modify Sanford's views as follows .....

*Issue Four:* "Should Every High School Develop a Core Curriculum?" RALPH W. TYLER

(a) I endorse Tyler's views .....

(c) No opinion on the issue .....

(b) I am opposed to Tyler's views .....

(d) I would modify Tyler's views as follows .....

*Issue Five:* "How Should the High School React to the Increasing Pressures to Predetermine Talent for Specialized Fields?" FRANCIS BACON

(a) I endorse Bacon's views .....

(c) No opinion on the issue .....

(b) I am opposed to Bacon's views .....

(d) I would modify Bacon's views as follows .....



## SHOULD A HIGH SCHOOL PRINCIPAL BE EXPECTED TO RECOMMEND STUDENTS FOR COLLEGE ADMISSION?<sup>1</sup>

GEORGE E. CARROTHERS  
*University of Michigan*

THERE are nearly always two sides to any question. This question is no exception. The speaker, however, for the purpose of this evening's program, takes the position that the principal should not be expected to give a graduate a specific recommendation before he can be admitted to college.

Prior to 1871 students were admitted to college only on the basis of extended examinations. That year the University of Michigan inaugurated the visiting and accrediting of high schools, the first time such a procedure had been heard of. Graduates of accredited schools who could obtain the recommendation of the principal, were admitted to the University of Michigan and later to other colleges without examination. The University of Michigan having started this practice of recommendation, a representative of that institution is now interested in helping to modify or stop it.

For several years the catalog of a great university carried the following statement: "It is expected that the principal will recommend not all graduates, but only those whose . . . attainments . . . and intellectual promise are so clearly superior that the school is willing to stand sponsor for their success at the university." That certainly is one way to shift responsibility to the high school. Just where is the college teaching to come in if success is guaranteed prior to admission?

<sup>1</sup> The first of the controversial issues in the symposium at Chicago, March 27, 1947.

### REASONS FOR NOT REQUIRING RECOMMENDATIONS NOW

1. High school enrollments fifty or sixty years ago were quite limited. Pupils were carefully selected from the upper-class families in society where education was traditional. Also, there was usually sufficient money to take care of the college education. Enrollments now run up to six and seven millions with very much larger numbers than formerly desiring to go to college.

2. Instead of the few colleges of a generation ago this country now has more than one thousand five hundred colleges of various sorts and kinds. The high school principal or his guidance staff should do all possible to help each senior become acquainted with institutions of higher education in which he may find an interest. After the help is given, the graduate with the assistance of his parents should make the decision as to the kind of further education he desires and can pursue with profit.

3. The millions of high school graduates have greatly varied interests and abilities; so varied that no one can know each pupil intimately. It is impossible today for a high school principal to know the colleges with their varied curricula and to know students so well that he can recommend a graduate to college and with any real confidence stand sponsor for his success.

4. The college catalog does not contain sufficient information to enable the high school principal to determine just the educational experience which a student will get in a particular institu-

tion. The admissions officer knows the college curricula and extracurricular offerings much better than any outsider can know them. He ought therefore to be held responsible for making selections of those applicants who give promise of succeeding best in that institution. For instance, I do not ask a business school to recommend and guarantee success of an applicant for a secretarial position in my office. We obtain all the information possible on available candidates; then we select the one who gives promise of being able to fit into the kind of set-up we maintain and to do the most efficient work in our organization.

5. When the college assumes full responsibility for selection, it feels a greater responsibility for the success of students. Every kind of available information should be furnished by the secondary school but selection should be made by the college; the college teaching and guidance staffs should then "break their necks" to get students to succeed. If they do not do well in college, the high school should not be blamed. The college should frankly acknowledge that its admissions system is not perfect. Alibis should be omitted.

6. It puts the high school principal on the spot to be required to furnish a recommendation, particularly in the small community. Influential citizens sometimes bring pressure on high school principals to recommend a son to "Dear Alma Mater" even though the "lazy lout" loafed his way through school and is in no way prepared to do college work. (Confidential letters to the admissions officer suggesting the taking of the recommendation with a large grain of salt frequently follow a forced recommendation.)

An acceptable, intelligent procedure to follow will be for admissions officers to obtain from secondary schools pertinent information on each applicant.

This report should show the courses taken, the quality of work done in each, the results of both achievement and aptitude tests during the years in high school, the outside interests and successes in extracurricular activities, the community activities in which the pupil has voluntarily engaged, such as leading a Boy Scout troop, camp leadership in the summer, teaching a Sunday School Class or handling similar groups, earning and saving money during outside hours, and the like, the way in which the applicant is developing as a citizen, and statements from persons who know the student personally. With all these items as a basis, the college should then select those applicants who seem best prepared to profit from studying in that particular college.

#### REPORT OF THE VOTING ON TOPIC NUMBER ONE

A total of 430 persons checked Issue One. Some ballots were from superintendents, professors, deans of colleges, and college officials. Only two ballots were checked "No Opinion"—one by a professor of Education and, of all persons, the other by a dean. Having been a dean in two different colleges it is interesting for me to learn that there is at least one question on which a dean has no opinion. Several persons came in while the talk was being given, so did not vote, and a few said, "Did not hear him." Some ballots merely contained comments. The following report is summarized from the 335 ballots turned in by principals of high schools.

	<i>Number</i>	<i>Percent</i>
Endorse Carrothers' views...	279	83
Opposed to Carrothers' views	24	7
Modify Carrothers' views...	32	10
Total.....	335	100

The principals voted 83.3 per cent against making a recommendation,



7.2 per cent for the recommendation and 9.5 per cent for a modification of the policy advocated by the speaker. Some ballots contained comments such as "A very sane point of view," "I have felt just that way for many years," "Whether he recommends or not the principal will be held responsible for college failure," "No difference one way or another, the college does as it pleases anyway," "Information should be furnished to the college," "Principals might well be asked to give a prediction on a scale as to the probable success of a student in a particular college," "I am opposed to giving a recommendation and not in favor of entrance tests or examinations."

After the meeting one principal handed in the statement that he voted with the speaker and that he believed the vote would have gone just as strongly the other way if the speaker had advocated as vigorously the other point of view. Let's hope not. That sort of comment is very discouraging.

Other comments were: "In our state we recommend all high school graduates." "The principal should recommend when, and only when he has enough facts to warrant his doing so."

"As a time saver, I'd vote 'yes.' But there are cases where the principal's judgment may help the entrance examiner." "If not the principal, then the guidance director, assistant principal or some other person on the staff well acquainted with the graduate." "I feel that it is an honor to sign a college recommendation when it is warranted. I agree that the college need not pay any attention to it." "The high school principal knows more about the student than a college professor and should be active in bridging the gap between the two schools." "The principal should make some comment as to his judgment of the student as a college risk." "Many colleges do not pay any attention to recommendations. Through their examinations and testing programs they are in a better position to make the decisions." "Some college entrance tests should be given in the senior year, thus giving the principal something objective to use for guidance." "I think the principal should be expected to recommend the college to the high school graduate." "It's high time to move toward the all-around better procedure outlined by the speaker."

## WHO SHOULD HAVE JURISDICTION OVER THE JUNIOR COLLEGE?<sup>1</sup>

JOHN GUY FOWLKES  
*University of Wisconsin*

Just three centuries ago, the infant colony of Massachusetts expressed its faith in schooling for everyone at public expense. In 1647 Massachusetts passed the first tax law for the support of public schools enacted in the United States of America. Every state in the Union followed the example of Massachusetts in providing for public schools at public expense.

The early public schools extended only through what has been termed the common school, but as populations grew and the educational needs of our people increased, the amount of education made available at public expense was sharply expanded throughout the country. Publicly endowed educational institutions include the common schools, general high schools, vocational and technical schools, trade schools, county rural normals, colleges of liberal arts and sciences, teachers colleges, various other special professional schools such as law, medicine, dentistry, engineering and architecture, extension centers and services, and universities. This imposing array of schools is clear cut proof of the fact that the public of today recognizes the need of, and has profound trust in, public education.

### THE "G. I. BILL"

In 1944 the faith that was expressed in the common school by Massachusetts in 1647 was reaffirmed nationally with respect to higher education. On June 22, 1944, the Congress of the

United States enacted Public Law 346, The Veterans Readjustment Act of 1944. Under this law, federal funds are given to those who served in the military forces in World War II in order that they may attend schools of their own choosing. The startling effect of this law is best seen in the fact that in October, 1946, of the approximately two million young men and women who were enrolled in colleges and universities, about 900,000 were veterans.

It is estimated that during the decade 1946-56, some 1,800,000 veterans will take advantage of the "G. I. Bill" to attend colleges and universities. Attention is called to the fact that approximately 1,100,000 non-veterans were attending colleges and universities in the fall of 1946. This figure is within about 300,000 of the maximum college enrollment in the United States up to 1946. It is estimated that in October 1946 there were 300,000 non-veterans and some 300,000 veterans who wished to attend college but who were refused admission to college because of the lack of facilities.<sup>2</sup>

It seems clear that practically all people should finish at least twelve years of schooling and many high school graduates should have work beyond high school graduation. The primary or basic educational need for those who have finished four years of high school work is a liberal education which has little if any direct relationship to vocational or professional

<sup>1</sup> The second controversial issue in the symposium at Chicago, March 27, 1947.

<sup>2</sup> Estimated by E. V. Hollis, Principal Specialist of Higher Education, U.S. Office of Education.



preparation. Along with or after this basic liberal education must come vocational, semiprofessional, or professional education which will qualify individuals to render personal service not only that they may be economically secure but more fundamentally that personal services which society demands will be available.

#### SPECIALIZED AND PROFESSIONAL EDUCATION

The specialized and professional education needed for the rendition of essential social services are many and varied. As never before, there is urgent need for highly specialized workers in various relatively narrow fields of knowledge. To support and assist these highly specialized professional workers a large number of technically trained people are needed. Many craftsmen are also badly needed. Secondary school principals and those interested in higher education alike would do well to realize the importance of these craft occupations. All of them are highly socially valuable, merit real respect and dignity, and offer opportunity for economic return which will provide a comfortable livelihood.

#### KINDS OF CURRICULA NEEDED

In light of the above stated needs, it seems that four basic types of educational opportunity should be provided for high school graduates, namely:

1. Liberal terminal—two years immediately following high school graduation, non-college
2. Liberal terminal and semiprofessional or vocational—two years immediately following high school graduation non-college
3. College work—freshman and sophomore years of a four-year letters and science college
4. Professional—third and fourth years of college work and graduate study

It is clear that existing institutions of higher learning in most cases will be unable to provide the proper kind of educational opportunity for all high

school graduates who should and do desire additional formal educational experience. It therefore seems clear that additional junior colleges must be established and maintained in order to meet the present day need for additional education for high school graduates.

A junior college is here defined as a two-year institution admission to which is open to those who have graduated from high school or can show evidence of equivalent development, rendering one or more of the following functions:

1. Offers two years of liberal terminal education
2. Offers two years of work which is a combination of liberal and semiprofessional or vocational terminal education
3. Offers the freshman and sophomore years of work of a four-year letters and science college

Liberal terminal education and vocational terminal education are here considered as curricula designed for students who wish in one year or two to gain an understanding of their intellectual, social, or civic environments; to explore several fields of work prior to making occupational choices; or to acquire semiprofessional or vocational training which leads to employment in semiprofessional, vocational, or trade fields.

Terminal programs are not intended to prepare students to transfer to four-year colleges. The freshman and sophomore years of work of a four-year letters and science college are here to be considered as being preparatory to later concentration or specialization in the arts or letters and science during the third and fourth years of college work. The third and fourth years of college work for most people in many respects is largely professional training.

#### WHERE SHALL JUNIOR COLLEGES BE ESTABLISHED?

Assuming, in light of the preceding discussion, that junior colleges are

needed, the question arises as to where such colleges shall be operated. Allen<sup>3</sup> in 1936 presented criteria for the establishment of junior colleges. In terms of Allen's study a minimum enrollment of 150 should probably be the basic criterion for a junior college. Such a population should provide roughly one hundred freshman and fifty sophomores. Other criteria for determining the need for and feasibility of the successful establishment of junior colleges are as follows:

1. A five-year average of 250 high school graduates per year
2. Forty percent of the high school graduates now attending college in all situations where the previous five-year average of high school graduates does not exceed 500
3. A five-year average of 1,100 students enrolled in the four-year high schools of the community, county, or area
4. A five-year average of 1,000 students in average daily attendance in the four-year high schools of the community, county, or area
5. A community, county, or area population of at least 19,000

Other factors such as distribution of population, transportation facilities, and highways must also be considered, but no hard and fast limitations are here suggested concerning these factors.

In general a junior college should be established only where there is no other institution of collegiate level that can be made to serve the educational needs of a given community, county, or area. In communities, counties, or areas where collegiate institutions already exist, the following questions should be raised: (1) Is the institution fully responsive to the educational needs, and if not, can the institution be made to meet these needs? and (2) Can high school graduates who should and do wish to continue their education do so

at such institutions without undue financial burden?

#### WHAT AGENCY SHALL HAVE JURISDICTION OVER PUBLIC JUNIOR COLLEGES?

At present, the administrative responsibility for public junior colleges varies considerably. In some instances the junior college is administered practically entirely by the local boards of education and superintendents of schools. In other instances the administrative responsibility is a joint affair between state authorities and local authorities.

Under the direct administration and supervision of the State Department of Education, Mississippi has established thirteen junior colleges. New York has planned the distribution of a series of institutions of applied arts and science on a regional basis. California, on the other hand, has fostered the development of local junior colleges.

We believe that education is a function of the state. Consequently it seems sound that the state should be the basic agency which plans the establishment of junior colleges. Furthermore, the state should assume primary responsibility for the financing of junior colleges. To be sure, the direct management of local junior colleges, whether serving communities, counties, or areas, must be primarily a local affair. However, it seems likely that the junior college will assume higher stature as an educational institution regardless of the particular objectives of a given junior college if there is joint jurisdiction between state and local communities, with the state university playing an effective part in the formulation of the curriculum of the junior colleges.

The establishment of state jurisdiction over junior colleges will probably stimulate some desirable scrutiny of the existing pattern of institutions of

<sup>3</sup> John Stuart Allen, *Criteria for the Establishment of Junior Colleges*, Ph.D. Thesis, New York University, 1936.

higher learning in any state. Two major questions which will probably arise from a state jurisdiction over junior colleges are as follows: (1) Are existing institutions of higher learning offering curricula which best serve the interests of the students and the state? and (2) What action can be taken to render more socially functional educational opportunity at the higher level in the most efficient manner from the standpoint of operation?

The reactions of 416 people to the

above presentation was as follows:

	<i>Number</i>	<i>Percent</i>
Endorse Fowlkes's views.....	252	61
Oppose Fowlkes's views.....	49	12
Modify Fowlkes's views.....	26	6
No opinion.....	89	21
Total.....	416	100

In terms of these reported opinions, it would seem that joint jurisdiction of the junior colleges is recognized as desirable in the future development of junior colleges.



## ARE HOME ROOMS IN MOST HIGH SCHOOLS A WASTE OF TIME?<sup>1</sup>

CHARLES W. SANFORD  
*University of Illinois*

Are home rooms in most schools a waste of time? The answer is *yes*. Why? Without laboring through home room history, or statistics, let us consider home room programs in terms of their purposes. Why do we have home rooms? The usual answers might be summarized as follows: to facilitate administration; to promote school spirit, under which might be catalogued the provision of opportunities for practicing democracy, and assisting the administration in the organization and promotion of extra-curricular activities; and to serve as the main agency in the guidance program. Do home rooms facilitate administration? Minor routine matters are handled. Among these are checking attendance, reading announcements, distributing report cards, and selling carnival tickets. Such routines are doubtless cared for quite efficiently, but no one would argue that they call for a home room system.

Do home rooms promote school spirit, including the provision of opportunities for practicing democracy and assisting in the organization and promotion of extra-curricular activities? School spirit seems to mean everything from who can yell the loudest, the longest, to genuine school citizenship at its best, which might include some yelling, to be sure. In a number of schools this purpose includes an effort to acquaint pupils with the extra-curricular activities offered and to get the pupils to participate in them. For these two tasks the home room is a con-

venience, it is a handy place in which to work, but again no one would argue that a home room is necessary for doing the work.

A different picture is presented when we consider the development of school citizenship, including loyalty to the school and a sincere desire to make it a better school. While this is a responsibility during the entire day of every teacher, it is wise to have an agency through which the program is coordinated and in which it is crystallized. An examination of citizenship programs in home rooms indicates the machinery is oiled rather well—we have our committees, pupils follow accepted parliamentary procedures, and they deposit waste paper in the proper places—but the power to run the machinery is weak. The power is the understanding by boys and girls of what constitutes good citizenship, of the elements essential to a strong democracy. To gain understanding of this type requires a penetrating study and analysis of the democratic process; further, it requires the provision of many opportunities for boys and girls to practice democracy.

Next, do home rooms facilitate guidance? Most of us would probably say that guidance should be the main function of the home room. In addition, we want good guidance in every classroom. If every teacher in every class attained the Utopian situation in which the needs, interests, and abilities of every pupil were really recognized, most mal-adjustments would not develop. Then we could say that our guidance had been excellent, and that

<sup>1</sup> The third of the controversial issues in the symposium at Chicago, March 27, 1947.

we needed less time for home room guidance. Since classroom Utopias do not obtain, we must ask whether the activities in our home rooms do provide good guidance. The answer is *no*.

Except in very unusual cases, superior guidance is not practiced in home rooms because the teachers in charge have completed only three or four hours of non-functional general psychology, two or three hours of a similar brand of educational psychology, no hours in guidance, no practice in guidance in practice teaching, and no training following employment, on the job. In brief, teachers are unprepared for guidance duties. In a large measure, the correction is up to those of us who claim we are preparing teachers. It is our job. We'll take it. But it is also up to the administrative head of every high school to provide situations in which home room teachers, prepared and unprepared, receive some training on the job for work in that particular school. If they are presently unprepared, it is obviously necessary to provide in-service training. And when some have acquired a reasonable degree of proficiency, newcomers can be apprenticed to them.

Superior home room guidance is not practiced in many schools because these schools persist in following the philosophy of throwing every teacher on his own. No school-wide home room program exists; there is no disposition to develop one. By some strange series of mental gymnastics, the authorities have concluded that the formulation of a program would stifle individual teacher initiative; so the home room teachers discharge the administrative chores and thereafter do as they please, and too many of them please to let the pupils study. Now studying is fine, but again we do not need home rooms for it. In short, superior home room guidance calls for a high order of planning on a

school-wide front.

But the absence of a well-planned program, including objectives, pupil experiences, and so forth, is only part of the picture. Home room teachers too often have each year a different group of pupils assigned to them. When they reach the point of knowing the pupils well enough to help them, a change is made. Or, if the better plan is in operation, namely, that of having the home room teacher and pupils remain together for four years, too often no provision is made for changing occasional pupils from one home room to another when personality clashes or other circumstances indicate that such is the part of wisdom.

Superior guidance takes time, an enormous amount of time. It is not completed during the home room period. Many hours are required for preparation, follow-up, counseling, testing, recording scores, analyzing records, and collecting occupational information—unless much time is given to such tasks the program fails. How many of us recognize this by making appropriate adjustments in the teacher load? The home rooms have been added to an overload. They cannot succeed, in many instances, on this basis. On this point, I like the plan in the New Trier Township High School at Winnetka, Illinois. This school has a home room period every day, and the teachers in charge of these rooms are relieved of one class.

Our home room physical arrangements do not lend themselves to effective individual guidance. This needs no explanation. There are many visual aids which could be used to enrich the program. One example is films on occupations for use in vocational guidance.

Superior guidance in the total school situation calls for a coordination of all guidance efforts: those which are carried on in home rooms, in class rooms,

and in extra-curricular activities. Principals know they ought to supervise each of these, including the home rooms. But they can't supervise the attendance-taking, check-type of home rooms, because supervision implies the presence of a learning situation, a place where boys and girls are learning something.

To return, in conclusion, to the question, "Are Home Rooms in Most Schools a Waste of Time?" the answer

is *Yes*. They were established in too many schools too quickly. To establish them was "the thing to do." They were to be the panacea for all of our growing pains. They were begun before teachers were prepared or programs planned. The next step is *not* to abolish them; rather it is to work towards the realization of the main purposes for which they were established.

The audience responded to the foregoing presentation as follows:

	<i>High School Principals</i>	<i>Superin- tendents</i>	<i>Professors of Education</i>	<i>Miscel- laneous<sup>1</sup></i>	<i>Total</i>	<i>Percent</i>
I endorse Sanford's views <sup>2</sup> ...	213	18	8	12	251	80
I am opposed to Sanford's views <sup>3</sup> .....	42	0	1	8	51	16
I would modify Sanford's views <sup>4</sup> .....	3	1	0	0	4	1
No opinion on the issue....	3	0	0	5	8	3
Total					314	100

<sup>1</sup> Included persons who described their positions are as follows: Dean of Liberal Arts College, Assistant Principal, Supervisor, College Registrar, Director of Admissions, General Executive, Dean, Graduate Student, College Dean, Head of Science Department in a College, Director of Secondary Education, County Superintendent, College Teacher, not a principal, Dean of Education, Director of Guidance, State High School Supervisor, State Department, State Director of Division of Instruction, and High School District Supervisor.

<sup>2</sup> Typical observations were: "They have a place in the school, but colleges and universities need to set up a curriculum to give practical training to teachers"; "We do not use the home room system for the reasons stated"; "I agree, but would still use the home room system for 'administrative convenience'"; "But it need not be so"; "I am in agreement on the fact that they can be made to function when teachers are properly trained and supervised."

<sup>3</sup> Typical observations were: "There are about the same number of classes where time is wasted as there are home rooms. Many teachers would welcome this escape from basic responsibility"; "I suggest a 25 minute home room program, carefully and effectively planned and organized"; "They do not need to be and are not in many schools"; "I believe in a short home room period (10-15 minutes) for administrative purposes"; "What would you recommend to carry out the work or duties carried out in the home room"; "A good principal will provide in-service training in guidance so that home rooms or counseling periods will be beneficial"; "If properly planned and organized, home rooms can help educate youth"; and "Some such a plan must be used or too much time is taken from class."

<sup>4</sup> Typical observations were: "The success of home rooms depends upon the philosophy of the administration and faculty. They can be made to function. A core curriculum can replace the home room"; "Orientation and citizenship may be successfully offered if units of study are developed on a grade-level basis"; "If we could work out a home room once or twice a week of 30 or 40 minutes, we might be in a better position to make progress"; "Any school with a large enrollment must have an organization to function in the supposed way a home room functions"; "Home rooms are worth while for administrative purposes, if for nothing else"; "Train teachers in home room techniques so it will function"; "Not all bad"; "It is still the best device we have"; "Do not abandon home rooms—train teachers, coordinate and supervise the program. Home rooms are basic and essential. We must develop the system"; "Most schools should be advised to abolish home rooms. There are other ways to achieve the desired aims of the home room which are more practical"; "There are important functions that home rooms might perform, such as providing opportunity for group cultivation. True, as conducted, but not a necessity."



## SHOULD EVERY HIGH SCHOOL DEVELOP A CORE CURRICULUM?<sup>1</sup>

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I HAVE been asked to present the affirmative position on this issue but before outlining the arguments for the suggested action may I define the term "core curriculum" as it will be used in this discussion? I am using the term "core curriculum" to mean the educational experiences that are planned jointly by teachers of two or more subjects to meet the common needs of students, experiences that cut across the usual subject lines and occupy about half of the student's high school day, excluding extra-curricular activities. This definition comes nearest to the several most common uses of the term in current educational publications.

An advocate of change should show that there is need for innovations. Are there weaknesses in the present curriculum of the American high school? If so, what are they? A careful study of a fair sample of American high schools indicates five major inadequacies of the curriculum.

The first of these is the lack of meaning which the high school program of studies has for a large fraction of the students. Interviews with students reveal that most of them see little significance to the content they are studying or to the skills and abilities demanded in their academic work. By and large they find little relation between their course work and their present lives or even their life objectives. The skills most frequently demanded are memorization of text material and ability to

repeat it orally and in writing. Another type of ability commonly required is the formal manipulation of numbers and symbols in exercises often called "problems" but having no apparent significance to students as problems needing solution. To a large part of the student body, course work is viewed as tasks assigned but not as vital and meaningful matters to be dealt with.

A second serious weakness in the curriculum is the lack of motivation. Many students profess no interest in the program of studies. Another large group is spurred by extrinsic factors such as threats of parental punishment, grades required for athletic eligibility or for admission to college. Only a small fraction express genuine interest in the content and methods of study and show eagerness to pursue their learning further in the fields in which they are now taking courses.

This is in sharp contrast to the motivation exhibited in extra-curricular activities. The genuine enjoyment large numbers of students show in athletics, in social activities, in hobbies, and even in out-of-school work experiences indicates a tremendous reserve of energy that is not now being utilized for much of high school learning.

A third important defect of the American high school curriculum is its almost exclusive preoccupation with verbal media of learning. Verbal communication and verbal expression are almost the sole means of exchange in the typical school. So dependent is the American high school upon the use of

<sup>1</sup> The fourth of the controversial issues in the symposium at Chicago, March 27, 1947.

words—reading and talking—that the best predictions of scholastic success are tests of verbal facility, particularly vocabulary tests. Students who grasp ideas better through pictures, diagrams, manual manipulation, demonstrations, field trips, and the like, have little opportunity for using these media in school learning. As a result, many students who are not verbally facile drop out of school or are dubbed “slow learners” while their potentialities for learning by the use of other media are unexplored.

In the same way, pupil expression in the classroom is largely limited to verbal expression. On the football field or the dance floor students may express themselves in bodily movement. The few who take art and music are exploring rich possibilities for their own emotional, physical, and intellectual expression. But the largest number of students never have opportunity to learn to express their ideas and feelings through varied media. They miss important avenues for emotional release, refinement of feelings, clarification of ideas and values.

A fourth major defect of the high school curriculum is its failure to achieve sequence and integration. Each learning experience, whether in school or without, generally makes but an imperceptible contribution to the educational goals sought. A single lesson does not produce marked changes in students. Ways of thinking, social attitudes, habits of study, for example, only develop through a good many learning experiences, each re-enforcing the others so that the cumulative effect is educationally significant. This organization of learning experiences which greatly increases their efficiency by maximizing their cumulative effect is a commonplace in elementary schools. Beginning with the primary grades and continuing on in the inter-

mediate grades, there is not only continuity in treating major objectives like skills in reading and arithmetic but there is also sequence so that each month or year builds on the preceding ones, going more broadly and deeply into the field rather than simply repeating work of preceding years. Furthermore, a good elementary school provides considerable integration, relating work in arithmetic, for example, to work in science by providing opportunities in science to use skills developed in arithmetic and thus increasing still more the cumulative effect of the various learning experiences.

Efficient organization of learning experiences is rare in the high school curriculum. Geometry in the 10th grade does not build upon the concepts and skills taught in 9th grade algebra. American History in the 11th grade does not build deeply and broadly upon 10th grade European History. Physics does not build on biology nor does sophomore English usually build on freshman English. There is little carefully planned sequence so that each year's work remains at the superficial level of a first approach to a field. This results not only in lack of depth in learning but also in a large amount of forgetting because of the failure to go on with matters partially developed.

It is also true that the typical high school curriculum provides for little integration. What a student does at nine o'clock has no connection with what he does at ten or eleven or one or two. Each subject is carried on in isolation without benefit of helpful interrelations. The result is a student who has subject-tight compartments of learning. Facility in writing is a matter for English classes, not for social studies. Equations are mathematical structures used in algebra, not in science. Historical developments are matters of his-

tory, not of music and art. Furthermore, the reenforcement to learning that interrelations would bring are lost. This lack of efficient organization is a serious waste.

A fifth weakness in the typical high school curriculum is the ineffectiveness of the devices used to correct widely recognized defects. The lack of meaning and motivation of the traditional high school program for many students has long been recognized but the two types of procedures employed in attempts to correct the situation have missed the point altogether.

One common device for correcting the situation has been to water down the old content. Thus, in science descriptive applications, such as "consumer science," have sometimes been substituted for physics and chemistry for students in the general curriculum. Memorizing these applications rather than understanding the principles of science has become the chief objective.

In mathematics, business arithmetic or shop arithmetic has taken the place of the older high school mathematics for the general student. Developing the ability to do simple arithmetic computations is the chief objective of such courses. In English, drill on usage has replaced rhetoric and literature for some of the students.

This watering down by emphasizing more memorization and repetitive skills defeats the whole purpose of high school education. The normal high school student is capable of thinking. Note how complex football tactics are analyzed and interpreted by the boy whose teacher complains of his inability to analyze and interpret a social science problem. Observe the girl examining the motives and predicting the actions of classmates while her teacher states that she cannot interpret human behavior in literature. The objectives of understanding,

analysis, interpretation, and appreciation are important and attainable. Watering down old content so as to leave out what little intellectual effort was required is not a solution to the high school curriculum.

Another common procedure for dealing with the lack of motivation in high school is to separate out the "non-academic" students, giving them vocational training or handwork in place of general education. Like the watering down method, this scheme fails to focus the teacher's efforts upon the most important educational objectives, namely those understandings, skills, habits, and dispositions essential to assume the responsibilities of the citizen, the family member, and friend and required by the student to attain his own potentialities. Instead the students work with their hands not to gain these goals of general education through other media but to gain some skill in some specific occupational field which most of them will not enter and for which most young workers need little training.

The very continuance of civilization demands intelligent citizens. To live a meaningful human life requires a range of intellectual and aesthetic experiences not adequately provided by the end of elementary school. For both these reasons, the high school curriculum problem cannot be solved by turning to other goals. The common efforts to correct the old curriculum are not satisfactory.

The preceding discussion has outlined five serious defects in the typical American high school curriculum. It has indicated the great need for improvement. Within the past fifteen years a number of high schools have developed core curricula as the means for overcoming the chief weaknesses of the high school program. The experiences of these high schools with a core cur-



riculum leads me to conclude that this innovation is no panacea but it involves features which contribute markedly to the improvement of the high school program.

In the first place, the development of a core curriculum requires re-thinking on the part of the teachers concerned rather than blind following of the old forms. Part of the reason that the old curriculum has not been meaningful to students is that it has not been meaningful to teachers. Teachers have not had to select material in terms of its values in attaining vital objectives. They could follow a text rather blindly or teach as they were taught without asking: Why? For what purpose? What content can help the student here? Because the core curriculum is planned by two or more teachers jointly in terms of content and abilities thought to meet the needs of students, the foregoing vital questions are asked and the answers obtained by the teachers are understood by them. This helps a good deal to insure meaningfulness to students.

In the second place, the planning of learning experiences to meet the common needs of students in a given class almost invariably brings in problems of community life. The use of community problems gives greater assurance of meaning to students, increases student interest, and extends the media of learning beyond purely verbal exchange. It also increases the probability of the student's using what he learns in his day-by-day living in the community.

In the third place, basing the core curriculum on common needs of students that cut across subject lines decreases the likelihood that teachers will deal with pedantic matters in the way they were taught in college. They, too, will need to learn and to get a better view of the way the student learns to

attack these common problems. This is another factor increasing the probability that the work will be meaningful and interesting to students.

In the fourth place, the fact that the core curriculum takes about two periods per day throughout the high school years provides for larger blocks of time, planned jointly over several years. This makes sequence and integration less difficult. It is easier to provide for integration within the core because the work is planned in a unified fashion. It is less difficult to provide for integration between other subjects and the core because the core is only one unit in planning to be related to each of the other fields while the two or more subjects which were previously offered required that many more interrelations be worked out.

It is easier to provide for sequence within the core because of the common planning through several years. When elements of sequence have been agreed upon and organizing principles selected, each unit of the core can be planned with this scheme of sequence clearly in mind.

Finally, the core curriculum because it occupies as much as two periods per day reduces the number of different classes for which a given core teacher is responsible and thus gives the teacher fewer students to teach and to know. Much of the effectiveness of instruction depends upon understanding the students as individuals, their needs, their interests, their abilities. Two periods per day gives more time to get an understanding of the students, and the requirement that the core be planned on the basis of common needs gives greater incentive for the teacher to gain an understanding of the students.

It is because of these potentialities for effective instruction that I favor the development of the core curriculum in the American high school. It provides a

good opportunity to initiate curriculum improvement.

The reactions of the audience to these views were as follows:

	<i>Number</i>	<i>Percent</i>
Endorse Tyler's views.....	201	49
Oppose Tyler's views.....	108	27
Modify Tyler's views.....	57	14
No opinion.....	40	10
Total.....	406	100

The most common question written on the ballots was "How can teachers be trained to conduct a core curriculum?" while the most common doubt expressed was that present teachers could not handle the job. The most frequent opposition to the proposal was "A core curriculum requires more intelligent teachers. The present courses can be handled with less knowledge and training on the part of the teachers."

It is interesting that the most common emphasis from the various points of view of the audience was on the training and effectiveness of the teacher. This is in harmony with the point made earlier that the core stimulates teachers to re-think their work and to study their students. There seems to be considerable agreement that the role of the teacher is crucial. I should maintain, however, that the fact that a teacher seems to know how to handle old courses by textbook methods does not mean that that teacher is getting better learning than if she were floundering a bit on new material. Smooth class room activity is memorizing meaningless material is not education. Clumsy, first efforts at working on new and more vital problems may actually result in greater learning.

## HOW SHOULD THE HIGH SCHOOL REACT TO THE INCREASING PRESSURES TO PREDETERMINE TALENT FOR SPECIALIZED FIELDS?<sup>1</sup>

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A STRIKING phenomenon of World War II was a serious shortage in scientific fields of highly qualified personnel and of peculiarly specialized trained talent. There was a frantic rush to make up the deficiencies. In the ensuing haste serious lacks or shortages in other fields were either unrecognized or ignored.

Since the close of the war it seems that these shortages have become little, if any, less acute. As realization of these lacks in certain trained personnel became increasingly apparent there was, at first, an attempt to assess responsibility upon the meagre foresight and awkward planning by Selective Service. Gradually it has become evident that other developments have also contributed to these distortions. Moreover it now begins to appear that some of these are tending to become permanent.

For example: (1) The maintenance of a tremendous military establishment requires a large number of highly qualified officers. Obviously the armed forces are eager to obtain the best possible talent as they plan the future officer personnel. (2) The recent emphasis on military scientific and technical research has developed new and extensive plans for the training and use of the highest grade civilian personnel as supplementary branches to the armed services. These plans increasingly extend far beyond anything con-

ceived at the end of the war. (3) Another development is in respect to considerable numbers of highly trained and talented persons for governmental technical, diplomatic, occupational, and advisory services abroad. (4) Business and industry are naturally inspired and influenced by the new provisions of government for obtaining specially trained personnel. Similarly there is a corresponding attempt to plan ways and means of directing the training and controlling the selection of equally good or better talent for the many new developments in the commercial world.

Both government and business realize, as never before, the compelling necessity to have an ever larger force of highly trained technicians to support sufficiently the top experts, all of which merely increases the emphasis upon early and peculiarly specialized training.

The proposals of the National Science Foundation and of the several bills before the Congress provide federal funds and forceful, attractive methods of influencing training and obtaining talent in certain specialized fields.

The fulfillment of all such planning naturally rests upon schemes of influencing the character of training and of operating the selective principle. Governmental subsidies are already working to these ends for the armed services. The new army and navy programs for college youth are examples. The larger city school systems are fully

<sup>1</sup> The fifth, and last, controversial issue in the symposium at Chicago, March 27, 1947.



conversant with the compelling recruiting programs for the best talent among high school seniors during the recent war. Aside from the patriotic motive, there was much distortion of certain types of talent to training and specialization not conducive to the best services of either the individual or the nation.

The proposed universal military training indicates great emphasis upon further highly specialized training. Obviously such a plan, if adopted, will roll back on the secondary schools in respect to such dissatisfaction in the preparation of youth, as the armed forces may discover. This result was clear enough in the criticism which came to the schools in the recent war.

Now all of this inevitably will put a new pressure upon the secondary schools to influence and to control, indirectly if you like, the methods of instruction and the character and content of the curriculum. And it could happen quickly and develop extensively before the schools are really aware of what the outcome could be.

The concern of the high school, it would seem, should be for a balanced development in all the areas of human life in respect to the training and utili-

zation of the best talent. The secondary school should maintain a freedom to learn in all fields and not permit monetary and other pressures to force the best talent into a few peculiar areas. Surely this is not the time to forego the uphill struggle through which secondary education has achieved its modern philosophy that educational opportunity should be open to all according to needs, interests, and abilities.

If necessary, a national system of scholarships should be generally applied to all higher institutions, not to a selected few (during the war the bulk of federal funds went to nine higher institutions), and for the development of the best talent under the operation of the most effective counseling system which can be devised. Obviously a large part of such counseling service should be done in the high schools.

The tabulated responses to this brief presentation resulted as follows:

	<i>Number</i>	<i>Percent</i>
Endorse Bacon's Views.....	369	88
Oppose Bacon's Views.....	28	7
Modify Bacon's Views.....	10	2
No opinion.....	12	3
	<hr/>	<hr/>
Total.....	419	100

## THAT'S HOW IT HAPPENED<sup>1</sup>

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A DEMOCRACY desires to have its mandates conform to the wishes of the majority of its members. In order that its actions may be guided into approved directions, it seeks to sound out the sentiment of the group. There are many ways of obtaining the opinions on any particular issue, personal interviews, informal conversation, voluntary letters, formal conversation, committee investigation, questionnaires, parliamentary debate, and a direct vote.

The Commission on Secondary Schools of the North Central Association of Colleges and Secondary Schools has, for the past several years, followed the practice of never taking any radical action that will materially affect the conduct and administration of its member schools without submitting the new proposal to a referendum vote of the principals of these schools. The Commission has followed this procedure because it has had faith in the democratic process, inasmuch as those whose interests would be affected by a change should certainly have some say about the matter. But it has not been content to stop at this point. It has appointed committees to analyze the returns and to report to the Commission. A still further step is to discuss the report in an open meeting of the Commission.

Such a situation arose as a result of the March, 1946, meeting of the Commission. At that time a report was pre-

sented by a special committee which had been assigned the task of bringing the existing Regulations and Criteria into conformity with the ideals and recommendations of the *Evaluative Criteria* of the Cooperative Study of Secondary School Standards. The sense and major content of the report were approved. The committee was instructed to edit it for printing, so that it might be submitted to the member principals for tentative approval. The printed revision was accompanied by a ballot on which the principal was to indicate his approval or disapproval of each separate item. He was also asked to give the reason, if he chose, for his vote on any particular item. These ballots were tabulated and analyzed and furnished the basis for the second report at the March, 1947, annual meeting of the Commission.<sup>2</sup>

It is the purpose of this paper to present some of the highlights of the discussion that took place on the floor of the Commission, Wednesday, March 26, and Thursday, March 27, 1947, with respect to the more controversial issues. The narrative will show the spirit of give and take that pervades the meetings of the Commission. It should also help to explain the reasons for the actions taken. Many who expressed their opinions on the ballots and who were not able to attend the 1947 meetings of the Commission may find their own arguments approved or opposed in what follows.

<sup>1</sup> Highlights of the discussion from the floor at the meeting of the Commission on secondary schools in Chicago when proposed changes in the regulations and criteria for the accrediting of secondary schools were being debated, March 26-27, 1947.

<sup>2</sup> Carl G. F. Franzén, "The Proposed Revision of the Regulations and Criteria of the Commission on Secondary Schools," NORTH CENTRAL ASSOCIATION QUARTERLY, XXI (April, 1947), 414-39.

The first proposal to draw fire was the one that related to the retroactive feature within a school system. The idea of the non-retroactive nature of the standards had been accepted up to the time of the previous revision. On their approval ballots many principals had expressed a desire for the restoration of this feature, but the sense of the meeting seemed to indicate that this favor be extended no further than within any one school system. It didn't take long for someone to raise the question as to what was meant by a school system. In terms of the public schools it usually meant an organization that came under a city superintendent of schools. But such a situation was not paralleled in what might be called a Catholic school system, where the schools would be under the jurisdiction of an Order. The representatives of such a system felt that they should be granted the privilege of transferring a teacher from any school under their authority to another school, under the same authority. Secretary Garretson claimed that such a transfer would not be permitted on a non-retroactive basis in his state, but his position was not supported by the majority of those present. Chairman Boardman finally made the following statement on the subject to explain the step that had led to the "non-retroactive" recommendation:

In one large city in recent years, because of declining enrollments and changes in population in communities and other reasons, teachers have been transferred by the superintendent or the administrative authorities from one school to another, up until this action was taken. In every instance where that occurred, when it was not voluntary on the part of the teacher, the school or the teacher was criticized, warned perhaps, because the teacher, in going to a new school, was not qualified under our standards.

The Administrative Committee took this action in an attempt to get around that situation, which does not seem fair and did not seem reasonable. . . . In a majority of instances these teachers who were transferred that way were

usually older teachers who were going past the meridian of life and therefore were on the downward path toward the sunset, and it just didn't seem reasonable to insist that they go back to college and attempt to get something qualified.

Following upon this explanation, Father Maline contended that in religious orders there were also those who were passing the meridian. He then made the appropriate suggestion that the whole matter be referred to the Administrative Committee and that this Committee make provision, in a rewording of the statement, to permit Catholic school systems under the control of an Order to profit by the non-retroactive feature. Everybody agreed to this suggestion. The motion was carried unanimously.

Regulation 3A3 contained a statement that each state committee submit the special teacher education requirements of its state to the Commission. Father Maline objected to this extra amount of paper work. He claimed that the old Regulation 2 took care of the matter when it stated that only those schools "in the highest class of schools as officially listed by the properly constituted educational authorities of the state were considered eligible for the approved list." His contention was that a school could be on the highest list only if it met the requirements, teacher education and others, of its state. When Chairman Boardman explained that the purpose of the statement was simply to have each state's teacher education requirements on file in the office of the secretary for purposes of the record, the regulation was unanimously adopted.

Two years ago, the Committee submitted a new library criterion to the principals for a referendum vote. Since the vote was overwhelmingly in favor of the criterion, the Commission adopted it at the 1946 annual meeting. Due to some mischance, the criterion was not formally adopted by the As-



sociation. Hence it could not go into effect. Since the proposed revision, submitted to the principals in the fall of 1946, contained this criterion, the Commission did not push its adoption at the 1947 meeting of the Association. It preferred to have it considered as a part of the new proposals.

As a library regulation in the new revision, it had been responsible for more criticism and comment than any other. It was only natural that this same attitude should be carried over into the Commission meeting. And why not? Many of these men were the same ones who had voiced their objections in written form. The comments did not take the form of objecting to the spirit of the new regulation so much as to the inability of so many schools to meeting its requirements. After a considerable amount of give and take, an agreement was reached to the effect that the new regulation on library staff might be upheld in those states where no hardship would thereby be inflicted upon the schools, but that all schools should meet the requirements within eight years after the regulation goes into effect. It was also understood that all librarians would have to qualify under the new regulation within the allotted time. In other words, the regulation would be retroactive. In the meantime, schools would continue to operate under old criterion until the new regulation was formally adopted by the Association.

"Who is a principal?" That question was discussed back and forth because of the wording of Regulation 4A. Someone said that men are called principals who are no more than attendance officers. Agreement was reached that it was up to each state committee to interpret what constitutes a principal and that, especially in the case of a small school, whoever signed the annual report blank was to be considered

the administrator in charge of that school. Another agreement was that the regulation should contain a statement that its provisions were not to be retroactive.

A point of considerable importance was raised by Mr. Franzén in connection with Regulation 7E. The vote of approval by the principals had been given to its wording in the printed bulletin. The Administrative Committee had gone on record to delete the disputed statement, "and provided also that the tests used are those approved by the North Central Association of Colleges and Secondary Schools." Since such a deletion definitely negated the policy that was implicit in the statement, Mr. Franzén felt that he had a right to challenge the recommendation of the Administrative Committee to modify the intent of a major portion of this particular regulation. The Administrative Committee had authority, he acknowledged, to edit and improve the wording, but not to destroy the sense, of any section. He therefore insisted that the criterion be retained as it had been voted upon by the principals.

Mr. Johnston and Chairman Boardman did not defend the right of the Administrative Committee to make the deletion. Rather they opposed the idea itself, a position which they had a perfect right to take. Mr. Johnston argued that the Association might get into a very complicated situation if it were to become a test-approving agency. He also doubted if the testing movement had been sufficiently developed so that all would be satisfied to have an accrediting association take over the task of approval. He cited a study made by Douglass in 1932, which seemed to be unfavorable to the idea.

Chairman Boardman questioned if any one could determine the tests to be given in his school. The content of

many tests might not accord with what was taught in his school. Any organization approving tests used in his school would have to know what his school was teaching, because the tests would be valid only in measuring what was taught.

Father Maline followed with a statement that the Commission did not check on the examinations that the school prepared for its own pupils to find out their validity. He thought that the statement, "Any supplementary evidence which may be considered necessary or desirable to establish the validity of such credits may be required," would take care of the situation. As in a later instance, Father Maline did not realize what a burden his suggestion might put upon the respective state committees.

Mr. Franzén tried to emphasize the point that this particular criterion was an experimental move in the direction of substituting achievement measured by a reputable standardized test for the Carnegie unit of definition of credit, and that consequently great care must be exercised in permitting only reputable tests to be used. He failed, however, to convince those present that a serious issue was at stake, so Dr. Johnston moved the deletion of the offending words. This motion carried 32 to 16. And that was that, so far as Criterion 3E (now 3D) was concerned!

The regulations on library expenditures had been passed unanimously before some one awoke to the fact that there was some confusion in the wording as to what constituted a permissible minimum expenditure. The trouble was caused by the fact that in Regulation 11A it was stated that the minimum amount of \$200 was to be expended annually in each school, whereas, in 11B there was a scale of recommended expenditures which seemed somewhat contradictory to the minimum previ-

ously mentioned. It was agreed that it was the duty of the Administrative Committee to word the regulation in such a way as to clarify the whole issue.

When it came time to discuss Criterion 2A, Father Maline challenged the objection which it contained to "an educational program which is concerned only with preparation for college." His thesis was that a good college preparatory program was also a preparation for life. Mr. Franzén said that the condemnation was against the sole purpose of preparing individuals for college. Chairman Boardman came to the defense of the affirmative. He said that there were all too many small high schools whose programs were strictly college preparatory, whereas what they ought to be doing was for the kinds of lives their students were going to live. "If the purpose is to have a curriculum of academic type which is not realistic in modern life, then this Association meant to condemn that kind of curriculum." The criterion thereupon was adopted unanimously.

The next item to arouse any discussion was that which dealt with the pupil activity program. Mr. Franzén claimed that the wording in the *Evaluative Criteria* was preferable to that in the printed bulletin because so many principals had objected to the bold way in which it was stated that students were to be allowed to participate in school government. He claimed that the *Evaluative Criteria* stated in much better language the whole philosophy of the pupil activity program. Mr. Johnston and some others opposed his plea on the ground that Mr. Franzén's substitution was too wordy. Mr. Johnston's argument carried more weight than Mr. Franzén's, so the latter yielded and moved the adoption of the printed statement. Mr. Mardis, who seconded the motion, did so in order that he might voice his objection to the

implication that students should participate in school government. He asked that the Administrative Committee be instructed to reword the statement in such a way as to convey what the principals believed it really meant, viz., that students participate in the organizations over which they have a certain measure of authority. When Mr. Franzén agreed to accept Mr. Mardis' recommendation as a part of his motion, it was carried unanimously.

That part of Criterion 3 that dealt with the requirement of a health examination of all teachers evoked quite a discussion. Mr. Keenan, of Chicago, cited his experience with the Tenure Committee of the National Education Association to prove that the health examination was the subterfuge employed by unscrupulous boards and administrators to get rid of teachers whom they could not discharge on any other basis. He claimed that every teacher organization in the country would oppose the inclusion of this criterion. Chairman Boardman added that he was in sympathy with the viewpoint expressed by Mr. Keenan but that the criterion had for its main purpose the protection of children. They were the ones who should come first in any consideration of health. Then Mr. Loos, of Ohio, challenged the medical profession to set up standards that would be suitably approved in reference to the degree of health a person should enjoy to be an effective school teacher. The rest of the discussion centered around the extent to which a mandatory criterion could actually be enforced. A compromise was reached by substituting the expression, "It is recommended that," in place of "should" and "shall." Thereupon the criterion was unanimously approved.

At the request of many of the voting principals, Mr. Franzén introduced

three statements to be added to the criterion on the administration of the activity program. The first one, that only one representative from the schools of any one state may represent that state in approved contests, etc., was sponsored by the National Contest Committee of the National Association of Secondary School Principals. But it ran into difficulty on the floor of the Commission. Such questions as to its coverage of athletic as well as non-athletic activities, as to the crossing of state lines in the case of conferences involving a natural geographical set-up, as to the extent to which flexibility of interpretation should be left up to the state commission so bogged down the whole affair that Mr. Franzén's motion to include the statement was lost for want of a second.

The other addenda, "It shall be the responsibility of the State Committee to furnish its member schools with a list of approved contests," and "The State Committee should give prompt action upon request for conducting activities," were accepted without any discussion. The Commission members had divested themselves of any further arguments on the activity question in debating the first proposal.

The last criterion to be challenged in any way was on the library. The voting principals had objected to the phrase, "standard classification system," in favor of, "or other acceptable classification system." Mr. Cross rightly raised the question, "Acceptable to whom?" Chairman Boardman suggested that such a statement should be included. The phrasing finally adopted was, "or other classification system acceptable to the State Committee."

Everything was going along smoothly in the direction of adopting the whole criterion, when a voice from the audience asked if any consideration



was to be given to the size of the library. Mr. Franzén acknowledged that he had tried to pass up that knotty problem. He mentioned a proposal that the size of the library be scaled according to the size of the school, and that consideration should be given to the schools that have decentralized libraries in the classrooms. Chairman Boardman argued very definitely in favor of buildings with adequate library space in them, so that students might be taught how to use libraries and to do independent work and study in them. Mr. Mardis stated that such a proposal was fine in planning new buildings, but that many schools had to get along as best they could with their present physical facilities. Mr. Franzén called attention to the word "approximate," and that Mr. Cross had interpreted it as 50 percent one way or the other. Mr. Klings, of Illinois, said that it was one thing to make such a statement in a meeting of this sort, and another to read into a printed statement an interpretation that wasn't there. Chairman Board-

man answered him by saying, "I don't think you need to be fearful in your particular kind of school, which has a specialized situation, that you would be judged adversely. It would be in terms, first, of the purposes of your school, and then in terms of the total pattern of your school." The Commission members agreed to this interpretation and approved the criterion unanimously.

There was no further argument on any of the criteria. When the motion was made and carried that the emended regulations and criteria be submitted to the principals for a referendum vote of adoption or rejection, Father Maline moved "that the Administrative Committee be empowered to make any necessary minor editorial changes to make the language and grammar correct, keeping the spirit and clear interpretation of the Commission as it has been reported here." His motion was seconded, put to a vote, and carried unanimously.

Thus ended a momentous meeting in the history of the Commission.

## STATISTICAL SUMMARY OF ANNUAL REPORTS FROM SECONDARY SCHOOLS, 1946-47

EDGAR G. JOHNSTON, Secretary  
Commission on Secondary Schools

THE data compiled from annual reports to the secondary commission are again presented in tabular form. By comparison with the report appearing in the *QUARTERLY* for January, 1947, the interested reader may discover noteworthy trends in the factors affecting the program of member schools.<sup>1</sup> Over a period of years these summaries should provide valuable source material for research studies in the development of secondary education in the Midwest.

The statistical report is organized into five sections, presenting data, respectively from schools with an enrollment less than 200, those in the categories 200 to 499, 500 to 999, 1,000 and over, and the combined summary for all schools. The statistics themselves will repay careful study. It may be worthwhile to point out some of the more significant trends in the total summary (Section V).

There is a substantial increase in the total number of pupils enrolled. While this figure is still more than 100,000 short of the peak enrollment of 1,612,619 reported for 1942, there is a definite upward trend. A feature which should occasion some concern to those responsible for the administration of our secondary schools is the *decrease* in enrollment reported for each successive grade in the senior high school years. (Only grades 10, 11, and 12 are considered here, since these are the only ones reported by all schools and hence,

present comparable data.) There is a significant drop in enrollment for the eleventh grade as compared with the tenth and for the twelfth as compared with the eleventh. That this is not merely a result of war-time employment is clear, since the relative holding power has not changed appreciably over a period of years. Query: Have we yet provided education appropriate "for *all* American youth"?

The average enrollment for North Central schools has changed but slightly from that reported last year. The number of graduates in 1946 shows an appreciable increase over that reported for the previous year, however, and is less than 10,000 below the high point registered by the graduating classes of 1943.

Length of term shows some increase over that reported last year. Only fifty-three schools report classes in session for less than 170 days and the number reporting terms of 185 or more days has increased to 321. There is a slight tendency among four year high schools to increase the graduation requirement to seventeen units. Surprisingly, twenty-four schools report a requirement of twenty or more units. Twenty-three of these schools are in one state.

In regard to summer schools, the expectation of my predecessor has been disappointed, since fifty-five more schools reported providing summer sessions than was the case last year. Length of term, length of period, and clock hours per unit of credit all show surprising variation from state to state and within states. There is evidently

<sup>1</sup> O. K. Garretson, "Statistical Summary of Annual Reports from Secondary Schools, 1945-46," *NORTH CENTRAL ASSOCIATION QUARTERLY*, XXI (January, 1947), 325-81.

need for a careful study of summer school practice, as a guide to school administrators and to state committees in determining a desirable pattern.

The data concerning library personnel will be of special interest in view of the imminent application of the new criterion on libraries. There is little change in the number of full-time and part-time librarians reported. Since some schools have more than one librarian and the number of schools having *no* librarians is not reported it is not possible to indicate with any accuracy the gap to be filled. That it is a considerable one is evident when we note that only 1,256 schools report librarians with as many as 16 hours of professional preparation and only 2,119, with as many as 6. Turning to the schools of various sizes (Sections I to IV), we find that in Group I (fewer than 200) less than one-third of the librarians reported meet the new criterion. For schools of Group II (200 to 499) about one-fourth meet the criterion for schools of that size. In Group III (500-999) 282 of 615 librarians reported meet the criterion and in Group IV (1,000 or more), 392 of 625. These data present a challenge, not merely to school administrators but to teacher training institutions in North Central territory.

There has not been as much turnover among administrators as was reported last year. Only 300 are reported as "new" in 1947 as compared with 599 in 1946. There are almost as many

entering their third decade in the same position. Administrative salaries show a slight increase.

The total number of full-time teachers in public schools shows an increase of 1,259 since last year and there is a corresponding decrease in the number of schools reporting a high pupil-teacher ratio. (Data for private schools are incomplete.) It is interesting to note an increase of approximately two-thousand in the number of men teachers employed full-time and a corresponding reduction in the number of women teachers. Salaries show a healthy increment. In fact the scale of distribution provided for tabulation was too low to give a complete picture of the salary range. The *mode* is at \$3,000 or more!

There is a marked increase in the number of new teachers reported, more than sixteen thousand. Preparation shows improvement. Thirty-eight have the doctor's degree and 2,112 the master's degree among the men, while only 282 are reported with no degree. For the women teachers, the comparable figures are 13, 1,255, and 313. Three hundred and twenty-nine men and 327 women lack the required professional training. On the whole, this picture is more encouraging than would have been expected in view of the general teacher shortage. If the figures for pupil enrollment continue to increase at the expected rate, however, the supply of qualified teachers may present a critical problem.



TABLE I

SUMMARY OF THE 1946-47 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING LESS THAN 200 PUPILS

STATE	TOTAL NUMBER SCHOOLS			ENROLLMENT DATA												GRADUATES			
				In Schools Reporting on Upper				By Grades											Total Number Enrolled
	3 yrs.	4 yrs.	5 yrs.	6 yrs.	7	8	9	10	11	12	Special	Boys	Girls	Total					
1. Arizona.....	16	0	1,803	151	229	43	71	652	566	450	394	7	2,183	136.4	129	198	327		
2. Arkansas.....	15	3	773	0	1,851	433	360	491	515	418	403	4	2,624	145.8	128	214	342		
3. Colorado.....	36	5	3,559	0	1,826	340	308	1,359	1,283	1,107	976	12	5,385	131.3	308	516	824		
4. Illinois.....	140	27	20,566	0	216	29	13	5,735	5,360	5,115	4,451	79	20,782	124.4	1,874	2,712	4,586		
5. Indiana.....	19	6	208	1,632	0	1,566	246	238	722	817	731	733	9	3,406	139.8	330	343	673	
6. Iowa.....	50	7	703	6,658	0	729	119	102	1,928	2,179	1,970	1,778	14	8,090	141.9	687	1,019	1,706	
7. Kansas.....	109	11	120	415	12,116	0	1,722	276	257	3,598	3,607	3,355	3,142	18	14,253	118.8	1,257	1,608	2,865
8. Michigan.....	22	9	1,051	2,828	475	668	90	174	1,038	1,299	1,234	1,099	88	5,022	162.	371	642	1,013	1,813
9. Minnesota.....	13	12	25	2,454	913	0	452	61	56	327	956	987	1,459	3	3,819	152.8	279	545	824
10. Missouri.....	29	24	53	195	6,186	125	1,203	182	2,028	2,072	1,691	1,538	15	7,709	145.4	480	879	1,359	1,879
11. Montana.....	14	2	16	0	1,677	0	274	51	47	470	499	430	451	3	1,951	121.9	156	250	406
12. Nebraska.....	85	7	92	552	10,926	0	700	93	97	3,068	3,049	2,962	2,833	76	12,178	132.4	1,091	1,480	2,571
13. New Mexico.....	10	1	11	0	794	0	746	138	128	422	347	261	241	3	1,540	140.0	60	107	167
14. North Dakota.....	40	2	42	334	5,073	0	646	80	93	1,428	1,534	1,574	1,395	0	6,053	144.1	414	758	1,172
15. Ohio.....	69	11	80	843	2,357	84	8,476	1,575	1,359	2,277	2,280	2,220	2,021	28	11,760	147.	835	1,020	1,855
16. Oklahoma.....	46	3	49	1,521	4,766	0	306	47	57	1,451	1,834	1,691	1,494	19	6,593	134.5	538	730	1,268
17. South Dakota.....	51	1	52	79	5,909	0	0	0	0	1,693	1,543	1,479	1,267	6	5,988	115.1	502	739	1,241
18. West Virginia.....	18	1	19	0	700	0	2,421	488	413	666	546	593	477	28	3,121	164.3	204	240	444
19. Wisconsin.....	9	9	18	0	2,155	140	386	46	61	670	656	642	586	20	2,681	148.9	190	283	473
20. Wyoming.....	11	1	12	0	907	0	592	114	92	341	342	316	293	1	1,499	124.9	108	146	254
TOTALS, 1947..	802	142	944	8,445	92,298	975	25,009	4,452	4,108	39,364	31,284	29,046	27,031	442	126,727	134.2	9,941	14,429	24,370
1946.....	856	135	991	8,495	93,969	1,191	26,950	4,522	4,658	32,828	32,970	29,355	25,899	373	130,605	131.8	10,001	14,093	24,904
1945.....	883	151	1,034	10,066	97,453	1,139	25,006	4,247	4,353	33,901	33,529	30,400	26,903	301	133,694	134.	10,964	16,388	27,352
1944.....	852	155	1,007	8,068	92,140	1,369	28,148	4,718	4,716	32,374	31,803	29,115	26,699	330	129,755	129.	12,505	16,018	28,523
1943.....	Totals not comparable—data from one state lacking.																		

TABLE I (Continued)

STATE	DAYS TAUGHT 1945-1946										UNITS FOR GRADUATION										MINUTES IN CLASS PERIOD									
											FOUR-YEAR SCHOOLS					THREE-YEAR SCHOOLS					NON-LABORATORY SUBJECTS					LABORATORY SUBJECTS				
											Less than 16	16	17	18	19	20 or more	Less than 12	12	13	14										
	Less than 170	170 to 174	175 to 179	180 to 184	185 or more	Less than 16	16	17	18	19	20 or more	Less than 12	12	13	14	15 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more				
1. Arizona.....	0	9	7	0	0	0	12	4	0	0	0	0	0	0	0	9	2	0	5	0	0	0	0	7	9					
2. Arkansas.....	0	7	11	0	0	0	18	0	0	0	0	0	0	0	0	7	4	4	2	1	0	0	2	3	13					
3. Colorado.....	0	22	12	6	1	0	41	0	0	0	0	0	0	0	0	21	10	3	7	0	0	4	3	10	24					
4. Illinois.....	0	10	83	47	27	0	163	3	1	0	0	0	0	0	0	131	11	9	11	5	5	1	1	9	151					
5. Indiana.....	0	8	13	1	3	0	23	1	0	0	0	0	1	0	0	9	3	2	11	0	1	1	0	15	8					
6. Iowa.....	0	20	36	1	0	0	40	0	0	0	12	0	5	0	0	23	13	3	8	10	2	2	2	12	39					
7. Kansas.....	0	21	73	25	1	0	116	1	0	0	0	0	3	0	0	42	12	15	22	29	0	0	5	25	90					
8. Michigan.....	2	5	7	11	6	0	25	1	0	0	0	0	4	0	0	12	7	4	5	3	2	0	1	9	19					
9. Minnesota.....	2	10	9	4	0	0	8	0	0	0	0	0	17	0	0	5	4	5	9	2	1	1	3	12	8					
10. Missouri.....	0	12	34	7	0	0	2	50	0	0	0	0	0	1	0	30	7	4	9	3	0	1	1	15	36					
11. Montana.....	0	7	6	3	0	0	16	0	0	0	0	0	0	0	0	3	5	0	5	3	0	0	0	5	11					
12. Nebraska.....	1	21	49	21	0	0	87	0	0	0	0	0	5	0	0	47	17	8	15	5	2	1	4	31	54					
13. New Mexico...	0	4	5	2	0	0	11	0	0	0	0	0	0	0	0	5	3	0	3	0	0	0	0	4	7					
14. North Dakota..	0	13	25	4	0	0	36	3	0	0	0	0	2	0	0	29	8	2	2	1	0	2	2	6	32					
15. Ohio.....	6	18	51	5	0	0	68	5	2	0	0	0	5	0	0	59	18	2	1	0	0	0	0	5	75					
16. Oklahoma.....	0	3	45	1	0	0	36	2	0	0	0	0	11	0	0	3	2	6	25	13	0	0	3	24	22					
17. South Dakota..	0	19	29	4	0	0	49	2	0	0	0	0	1	0	0	25	17	8	0	2	2	3	1	17	29					
18. West Virginia..	0	6	12	1	0	0	18	1	0	0	0	0	0	0	0	1	0	1	12	5	0	1	12	6	6					
19. Wisconsin.....	0	6	9	2	1	0	18	0	0	0	0	0	0	0	0	8	4	2	3	1	1	2	1	4	10					
20. Wyoming.....	0	5	7	0	0	0	12	0	0	0	0	0	0	0	0	3	4	0	5	0	0	0	0	6	6					
TOTAL, 1947...	11	226	523	145	39	0	799	73	3	0	12	0	54	1	0	2	472	151	78	160	83	16	18	30	231	649				

TABLE I (Continued)

STATE	SUMMER SESSION																								
	Number of Schools Maintaining	Length in Days					Minutes in Class Period										No. of Clock Hours for Each Unit								
		Length in Days					Non-Laboratory Subjects					Laboratory Subjects					No. of Clock Hours for Each Unit								
							Less than 40	41 to 60	61 to 80	81 to 100	101 to 120	121 or more	Less than 40	41 to 60	61 to 80	81 to 100									
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Arkansas.....	4	0	2	0	0	2	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	3	0	0	1
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Illinois.....	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Iowa.....	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
7. Kansas.....	5	1	1	3	0	0	2	2	0	0	1	0	0	3	0	0	1	0	1	0	0	2	0	0	2
8. Michigan.....	3	0	2	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0
9. Minnesota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. Missouri.....	10	1	2	4	3	0	0	9	0	1	0	0	2	4	0	2	2	0	0	0	0	5	1	4	0
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Nebraska.....	5	0	0	3	0	2	0	1	0	3	0	1	0	1	0	1	1	2	2	0	0	1	1	1	1
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio.....	1	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
16. Oklahoma.....	6	0	0	5	1	0	0	3	0	1	1	1	0	1	0	1	3	1	1	0	1	1	0	4	0
17. South Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18. West Virginia.....	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
19. Wisconsin.....	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL, 1947.....	38	4	8	17	5	4	2	19	1	7	5	4	2	10	0	7	6	4	8	1	1	13	2	13	13



TABLE I (Continued)

STATE	LIBRARIANS				SALARIES—ADMINISTRATORS																										
	Total No. Full- Time	Total No. Part- Time	Semester Hours of Training in Library Science				Superintendents—Public Schools																Principals—Public Schools								
			24 or more	16 to 23	6 to 15	o to 5	1750 to 1999	2000 2249	2250 2499	2500 2749	2750 3099	3100 3499	3500 3999	4000 4499	4500 4999	5000 5499	5500 5999	6000 6499	6500 6999	7000 7499	7500 or more	1750 to 1999	2000 2249	2250 2499	2500 2749	2750 2999	3000 3499	3500			
1. Arizona.....	2	17	o	o	4	15	o	o	o	o	1	o	4	3	o	o	o	o	o	o	o	o	o	o	o	o	o	2	1	2	
2. Arkansas.....	7	18	2	o	5	18	o	o	o	o	4	o	4	4	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
3. Colorado.....	7	39	o	2	7	37	o	o	4	o	3	14	8	4	1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
4. Illinois.....	15	212	14	4	65	144	o	o	o	o	1	8	9	10	1	o	o	o	o	o	o	o	o	o	o	o	o	o	2	3	26
5. Indiana.....	4	22	8	7	5	6	o	o	o	o	o	3	3	1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1	6
6. Iowa.....	10	67	o	1	15	61	o	o	o	o	1	3	22	13	3	o	o	o	o	o	o	o	o	o	o	o	o	o	3	1	1
7. Kansas.....	20	162	6	2	41	133	o	o	o	1	2	31	23	6	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1	2	19
8. Michigan.....	6	28	5	3	5	21	o	o	o	o	1	5	7	6	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
9. Minnesota.....	7	18	9	16	o	o	o	o	o	o	o	1	3	3	o	2	o	o	o	o	o	o	o	o	o	o	o	o	o	2	1
10. Missouri.....	8	43	5	3	18	25	o	o	o	2	2	8	6	2	1	1	o	o	o	o	o	o	o	o	3	1	1	1	2	o	o
11. Montana.....	1	17	1	1	5	11	o	o	o	o	o	4	5	3	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1	o
12. Nebraska.....	11	99	5	2	12	91	o	o	o	2	1	44	29	2	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1	2	1
13. New Mexico.....	1	10	o	o	4	7	o	o	o	o	o	o	2	5	1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	2	o
14. North Dakota.....	4	38	o	2	16	24	o	o	1	o	2	21	14	1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1
15. Ohio.....	10	71	11	2	10	58	o	o	o	2	2	20	10	2	o	o	1	o	o	o	o	o	o	o	o	o	o	1	2	7	11
16. Oklahoma.....	7	35	7	2	11	22	o	o	o	o	o	14	9	6	1	o	o	o	o	o	o	o	o	o	o	2	2	2	3	4	3
17. South Dakota.....	o	37	o	o	o	37	o	o	o	o	o	36	13	1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1	o
18. West Virginia.....	3	20	1	o	7	15	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1	6	2	8	1	
19. Wisconsin.....	4	15	5	o	9	5	o	o	o	o	o	2	o	o	1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	1	3
20. Wyoming.....	2	10	1	o	2	9	o	o	o	o	o	2	5	1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	2	1
TOTAL, 1947..	129	978	80	47	241	739	o	o	5	7	15	221	168	74	16	3	1	2	o	o	o	3	11	27	30	87	91	91	91	91	91

TABLE I (Continued)

SALARIES—ADMINISTRATORS (Continued)																																
STATE	Principals—Public Schools (Continued)										Superintendents—Private Schools														Private School Principals							
	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499	1500 to 1749	1750 to 1999	2000 to 2499	2500 to 2749	2750 to 3099	3100 to 3499	3500 to 3999	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499			
1. Arizona.....	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2. Arkansas.....	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	
4. Illinois.....	19	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	14	0	0	0	0
5. Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	
6. Iowa.....	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6	0	0	0	0	
7. Kansas.....	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	8	0	0	0	0	
8. Michigan.....	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	
9. Minnesota.....	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	
10. Missouri.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	
11. Montana.....	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
12. Nebraska.....	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
14. North Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
15. Ohio.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	7	0	0	0	0	
16. Oklahoma.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
17. South Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18. West Virginia..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
19. Wisconsin.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
TOTAL, 1947..	31	8	1	0	1	0	0	0	5	0	0	0	1	0	2	0	3	2	3	0	1	1	1	1	0	1	2	86	0	0	0	0

TABLE I (Continued)

SALARIES—Administrators (Continued)																TOTAL NUMBER OF ADMINISTRATORS			NUMBER OF YEARS ADMINISTRATORS HAVE HELD PRESENT POSITION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
STATE	Principals—Private Schools (Continued)																Total Public Schools		Total Private Schools		Less Than 1 yr.	1	2	3	4	5	6 to 10	11 to 15	16 to 20	21 or more																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 2999	3000 to 3499	3500 to 3999	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 7000	7500 or more	Supt.	Prin.	Supt.	Prin.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		



TABLE I (Continued)

SALARIES—FULL-TIME TEACHERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Public Schools—Men																			Public Schools—Women																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
STATE	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1. Arizona.....	0	0	0	0	0	0	1	7	17	12	11	2	50	1	0	0	0	0	0	13	16	14	10	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE I (Continued)

STATE		SALARIES—FULL-TIME TEACHERS (Continued)																								TOTAL FULL-TIME TEACHERS				
		Private Schools—Men												Private Schools—Women																
		Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999			3000 or more	Total	
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104	0	
2. Arkansas.....	0	0	0	1	0	0	0	0	0	0	0	0	4	15	0	0	2	0	0	1	0	0	0	0	0	0	0	18	22	
3. Colorado.....	1	0	0	0	0	0	0	0	0	0	0	0	1	30	0	0	0	0	0	0	0	0	0	0	0	0	30	225	31	
4. Illinois.....	0	0	0	0	0	0	2	12	5	5	7	21	52	7	2	5	12	21	21	15	15	1	1	1	0	0	100	1021	152	
5. Indiana.....	0	0	1	0	0	0	6	5	4	0	2	5	28	3	0	0	0	0	1	2	0	0	0	0	0	0	6	132	34	
6. Iowa.....	3	0	0	0	0	0	0	0	0	0	0	0	3	34	0	0	0	0	0	1	0	0	0	0	0	0	40	355	43	
7. Kansas.....	13	2	0	1	0	0	0	2	2	0	0	0	20	56	6	0	1	1	1	0	0	1	0	0	0	0	66	752	86	
8. Michigan.....	0	0	0	0	0	0	1	3	5	0	0	1	10	1	1	2	0	2	3	0	1	0	0	0	0	2	12	136	22*	
9. Minnesota.....	0	0	0	0	0	1	1	0	0	3	3	0	2	10	4	0	4	5	6	2	1	2	3	4	3	3	37	70	47	
10. Missouri.....	7	0	0	0	0	1	1	1	3	4	4	2	6	28	72	2	4	4	0	9	5	6	3	1	7	0	113	186	141	
11. Montana.....	1	0	0	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	9	06	10	
12. Nebraska.....	0	0	1	0	0	1	1	1	2	0	0	0	5	16	0	4	0	0	0	3	1	0	0	0	0	0	27	589	32	
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	76	5	
14. North Dakota..	0	0	1	0	0	0	0	1	0	0	0	0	2	13	0	0	0	0	0	0	0	0	0	0	0	0	13	209	15	
15. Ohio.....	0	0	0	0	0	0	0	1	0	2	4	18	25	0	0	0	0	1	0	1	1	2	1	1	0	0	6	472	31*	
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	4	0	1	1	1	0	0	0	0	11	270	11	
17. South Dakota...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	270	4	
18. West Virginia..	0	0	0	0	0	0	1	3	3	0	1	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	116	11
19. Wisconsin.....	3	0	0	0	0	0	0	0	0	1	2	15	23	34	0	0	0	0	0	0	0	0	0	0	1	2	37	71	60	
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7	73	7	
TOTAL, 1947..	28	2	3	2	1	9	11	33	29	16	18	71	223	308	11	20	29	35	41	28	28	11	7	11	12	541	5347	764*		

\* Not all schools reported.

TABLE I (Continued)

STATE	NUMBER OF SCHOOLS WITH PUPIL-TEACHER RATIO OF:												AVERAGE NUMBER CLASSES DAILY PER TEACHER						NUMBER OF PUPILS ENROLLED FOR FIVE OR MORE UNITS					PER CENT OF TOTAL ENROLLMENT IN EACH GRADE													
	To 14.0		14.1 to 16.0		16.1 to 18.0		18.1 to 20.0		20.1 to 22.0		22.1 to 24.0		24.1 to 26.0		26.1 to 28.0		28.1 to 30.0		Over 30	Less than 3	3	4	5	6	7 or more	9	10	11	12	Total	9	10	11	12	Total		
	To 14.0	14.1 to 16.0	16.1 to 18.0	18.1 to 20.0	20.1 to 22.0	22.1 to 24.0	24.1 to 26.0	26.1 to 28.0	28.1 to 30.0	Over 30																											
1. Arizona.....	7	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	8	3	22	43	45	62	172	3.4	7.6	10.0	15.7	8.3		
2. Arkansas.....	4	3	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	4	0	4	21	23	32	80	.8	4.1	5.5	8.0	4.37		
3. Colorado.....	11	11	6	8	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	10	14	3	25	70	104	90	289	1.8	5.5	9.4	9.2	6.1	
4. Illinois.....	99	40	21	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	24	62	58	10	30	109	256	334	729	.5	2.0	5.	7.5	3.5	
5. Indiana.....	10	4	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	17	5	8	30	81	87	206	1	4.	11.	12.	7.	
6. Iowa.....	22	11	20	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	15	23	14	2	0	44	91	123	258	0	2.0	4.6	6.9	3.2	
7. Kansas.....	70	25	19	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	32	59	20	3	143	219	237	310	909	3.9	6.0	6.7	9.8	6.6
8. Michigan.....	8	7	2	4	3	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	14	6	5	76	116	115	136	443	7.	9.	9.	12.	9.	
9. Minnesota.....	15	2	3	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	8	4	0	131	66	71	69	337	40.	6.	6.	4.	8.	
10. Missouri.....	14	10	11	9	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	11	21	15	3	75	81	129	117	402	3.7	3.9	7.6	7.6	5.7
11. Montana.....	5	3	6	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	4	1	8	24	65	58	155	1.7	4.8	15.1	12.8	8.1	
12. Nebraska.....	17	21	30	11	9	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	43	21	8	55	124	203	232	674	1.8	4.0	9.0	8.2	5.5	
13. New Mexico.....	2	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	4	1	23	15	18	20	76	5.4	4.3	6.9	8.3	5.9	
14. North Dakota.....	3	4	3	0	9	6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	8	13	15	6	77	134	101	110	422	5.4	8.7	6.7	7.9	6.9	
15. Ohio.....	15	10	15	16	17	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	10	35	30	63	159	179	216	617	2.8	6.9	10.6	8.0	5.2	
16. Oklahoma.....	8	4	9	15	4	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	12	28	6	0	4	57	105	162	328	.3	3.	6.	11.	5.0	
17. South Dakota.....	9	15	7	12	4	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12	24	13	3	2	27	82	77	188	.1	1.	5.	6.	3.1	
18. West Virginia.....	3	3	0	4	1	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	4	1	10	43	45	66	164	1.5	7.8	8.9	13.8	7.4	
19. Wisconsin.....	10	0	3	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	7	4	1	11	59	73	64	207	1.6	9.0	11.3	11.0	8.1	
20. Wyoming.....	6	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	1	6	31	24	32	93	1.7	9.0	7.5	10.9	7.2	
TOTAL 1947.....	338	180	173	115	67	39	18	7	4	2*	11	27	179	388	258	81	773	1472	2107	2397	6749	2.5	4.7	7.2	8.9	5.7											

\* Not all schools reported.



TABLE I (Concluded)

STATE	NEW STAFF MEMBERS	DEGREES AND PROFESSIONAL TRAINING (NEW TEACHERS)										EXPERIENCE (NEW TEACHERS)														
		Men					Women					Men						Women								
		PhD	MA	BA	No BA	Less than 15 Educ.	PhD	MA	BA	No BA	Less than 15 hrs. Educ.	Less than yr.	1 yr.	2 yr.	3 yr.	4 yr.	5 yr.	6 yr.	Less than 1 yr.	1 yr.	2 yr.	3 yr.	4 yr.	5 yr.	6 yr.	
		Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	
1. Arizona.....	32	30	62	0	5	26	1	1	0	8	22	0	0	9	3	3	5	1	0	11	9	2	3	6	1	8
2. Arkansas.....	29	36	65	0	8	20	1	2	0	6	28	2	4	6	2	3	1	0	1	16	6	1	4	4	3	12
3. Colorado.....	93	66	159	0	28	58	7	16	0	5	53	8	7	31	13	12	6	3	3	25	22	4	9	2	7	
4. Illinois.....	270	368	578	0	60	200	10	1	6	103	190	9	1	86	35	35	25	17	14	58	122	28	36	28	18	
5. Indiana.....	46	36	82	0	12	33	1	0	0	5	30	1	0	20	4	3	3	1	0	15	11	4	4	3	1	
6. Iowa.....	104	118	222	0	15	88	1	10	0	15	101	2	6	36	14	8	11	4	7	24	41	8	13	4	6	
7. Kansas.....	236	238	474	0	43	180	13	13	0	29	199	10	7	73	22	27	25	14	7	68	66	29	26	19	8	
8. Michigan.....	47	58	105	1	14	32	0	1	0	13	44	1	4	15	6	4	1	3	1	17	21	4	8	3	4	
9. Minnesota.....	39	67	106	0	5	34	0	0	8	8	57	2	4	13	4	2	4	3	4	9	21	1	4	5	20	
10. Missouri.....	75	112	187	0	19	53	3	5	0	19	91	2	3	26	8	7	10	3	2	19	32	6	6	9	7	
11. Montana.....	39	37	76	0	3	29	7	7	0	7	27	3	3	5	7	2	7	3	4	11	5	3	8	5	3	
12. Nebraska.....	168	169	337	1	36	125	6	12	0	19	140	10	14	50	18	17	12	11	6	54	52	10	7	11	6	
13. New Mexico....	21	17	38	0	2	19	0	3	0	1	16	0	1	6	5	1	3	1	1	4	4	2	1	2	1	
14. North Dakota..	65	83	148	0	10	54	1	0	0	7	70	6	0	21	16	8	1	2	3	14	23	14	12	7	3	
15. Ohio.....	121	109	230	0	16	101	4	3	0	15	90	4	2	47	16	10	10	9	6	23	31	12	10	12	6	
16. Oklahoma.....	94	117	211	3	33	54	4	9	1	26	84	6	4	16	10	5	9	5	7	42	27	10	3	8	15	
17. South Dakota...	80	87	167	0	20	53	7	0	0	4	72	11	0	23	11	5	10	7	1	23	32	10	13	10	7	
18. West Virginia...	33	29	62	0	7	24	2	3	0	3	23	3	1	10	3	3	3	0	1	13	13	1	5	3	0	
19. Wisconsin.....	31	25	56	0	8	23	0	3	0	2	23	0	1	21	0	1	2	1	2	1	6	13	3	0	0	
20. Wyoming.....	25	19	44	1	4	17	3	4	0	3	16	0	0	5	3	4	0	0	2	11	5	1	2	3	2	
TOTAL 1947..	1,648	1,761	3,409	6	348	1,223	71	93	7	208	1,376	80	62	519	200	159	147	89	71	463	556	173	169	150	113	82

TABLE II

## SUMMARY OF THE 1946-47 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING 200 TO 499 PUPILS

STATE	TOTAL NUMBER SCHOOLS			ENROLLMENT DATA										GRADUATES		
				In Schools Reporting on Upper				By Grades								
	Public	Private	Total	3 yrs.	4 yrs.	5 yrs.	6 yrs.	7	8	9	10	11	12	Special		

1. Arizona.....	21	0	21	435	4,720	0	1,223	199	204	1,753	1,700	1,327	1,169	26	6,378	303.7	355	865
2. Arkansas.....	37	1	38	2,242	3,436	330	5,008	963	897	2,026	2,707	2,373	2,041	9	11,016	289.9	601	1,751
3. Colorado.....	38	6	44	908	10,725	443	1,889	323	398	3,477	3,705	3,179	2,863	110	14,055	319.4	1,263	2,666
4. Illinois.....	105	38	143	401	35,860	227	283	45	59	10,704	9,357	8,862	7,636	108	36,771	257.1	3,187	7,378
5. Indiana.....	67	1	68	961	12,568	548	8,541	1,471	1,417	5,500	5,257	4,750	4,167	56	22,618	332.6	1,937	4,152
6. Iowa.....	76	7	83	3,681	19,013	0	2,943	422	442	5,615	6,742	6,396	5,876	144	25,637	308.9	2,426	5,398
7. Kansas.....	59	1	60	2,589	12,909	0	2,747	430	386	3,967	4,986	4,520	3,900	56	18,245	304.1	1,633	3,699
8. Michigan.....	96	13	109	4,748	16,644	2,398	12,967	1,858	2,322	7,862	9,020	8,217	7,325	123	36,757	337.2	2,811	6,524
9. Minnesota.....	51	6	57	13,955	2,838	0	517	59	73	885	6,109	5,394	4,813	67	17,310	303.7	1,860	4,553
10. Missouri.....	59	19	78	3,041	16,084	1,376	4,828	695	871	5,533	6,702	5,794	5,714	20	25,329	324.7	2,203	4,593
11. Montana.....	9	0	9	0	2,227	0	0	0	0	595	585	537	593	7	2,227	247.4	215	226
12. Nebraska.....	41	3	44	1,533	10,314	0	1,153	154	148	3,054	3,428	3,255	2,941	20	13,000	295.4	1,237	2,726
13. New Mexico.....	22	0	22	1,789	3,224	395	2,215	401	485	1,681	1,991	1,666	1,382	17	7,623	346.5	598	1,154
14. North Dakota.....	16	2	18	748	3,040	223	464	61	107	1,161	1,373	1,234	1,125	14	5,075	281.9	383	980
15. Ohio.....	166	14	180	3,126	19,387	905	32,562	5,623	5,384	11,702	12,070	11,173	9,976	52	55,980	311	4,192	9,828
16. Oklahoma.....	51	0	51	7,366	8,775	0	0	0	0	2,625	4,022	4,536	4,025	33	16,141	316.5	1,446	3,397
17. South Dakota.....	25	1	26	1,235	6,058	0	314	42	38	1,868	2,113	1,897	1,623	26	7,607	292.6	724	1,661
18. West Virginia.....	81	1	82	1,111	8,631	0	18,453	3,237	3,068	6,162	6,105	5,115	4,360	148	28,195	343.8	1,781	4,191
19. Wisconsin.....	47	10	57	1,971	14,591	0	2,344	267	323	4,378	4,893	4,707	4,301	37	18,906	331.7	1,708	3,969
20. Wyoming.....	15	0	15	0	2,985	0	1,162	225	180	1,049	929	934	822	8	4,147	276.5	300	688
TOTALS 1947..	1,082	123	1,205	51,930	214,629	6,845	99,613	16,475	16,802	81,627	94,604	85,776	76,562	1,081	373,017	309.5	30,950	70,524
1946.....	1,053	128	1,181	53,374	214,666	6,419	102,098	16,710	17,428	85,349	98,073	85,156	73,114	757	376,587	318.9	28,576	69,486
1945.....	1,046	117	1,163	56,831	208,056	6,273	98,414	16,366	16,951	84,589	95,367	83,250	72,435	613	369,574	318.	30,434	73,944
1944.....	Totals not comparable—data from one state lacking.																	
1943.....																		

TABLE II (Continued)

STATE	DAYS TAUGHT IN 1945-46					UNITS FOR GRADUATION										MINUTES IN CLASS PERIOD									
						FOUR-YEAR SCHOOLS					THREE-YEAR SCHOOLS					NON-LABORATORY SUBJECTS					LABORATORY SUBJECTS				
	Less than 170	170 to 174	175 to 179	180 to 184	185 or more	Less than 16	16	17	18	19	20 or more	Less than 12	12	13	14	15 or more	40 to 44	45 to 49	40 to 44	45 to 49	50 to 54	55 to 59	60 or more		
1. Arizona.....	1	12	7	1	0	0	17	1	2	0	0	0	1	0	0	0	4	2	0	15	6	15	6		
2. Arkansas.....	0	12	24	2	0	0	30	0	0	0	0	0	7	0	1	1	11	15	6	5	1	4	26		
3. Colorado.....	2	13	17	10	2	0	40	0	0	0	1	0	3	0	0	0	8	10	10	15	1	6	19		
4. Illinois.....	1	12	57	50	23	1	130	7	4	0	0	0	0	0	0	1	85	13	4	19	22	2	115		
5. Indiana.....	1	19	43	3	2	0	63	2	0	0	0	0	3	0	0	0	10	4	10	38	6	3	14		
6. Iowa.....	0	33	45	5	0	1	63	0	0	0	8	0	10	0	0	1	14	9	7	41	12	0	34		
7. Kansas.....	0	6	42	12	0	0	48	3	2	0	0	0	4	3	0	0	7	1	0	24	28	0	36		
8. Michigan.....	1	6	21	50	31	0	92	3	1	0	0	0	11	0	0	2	39	14	13	38	5	0	50		
9. Minnesota.....	6	39	9	3	0	0	8	1	0	0	0	0	48	0	0	0	2	2	4	39	10	0	9		
10. Missouri.....	0	7	48	20	3	0	3	67	0	0	0	0	1	7	0	0	31	6	8	30	3	2	32		
11. Montana.....	0	3	5	1	0	0	9	0	0	0	0	0	0	0	0	0	1	3	0	4	1	0	5		
12. Nebraska.....	1	6	27	10	0	0	0	39	0	0	0	0	5	0	0	0	10	4	3	23	4	0	19		
13. New Mexico...	0	7	10	5	0	0	15	2	0	0	0	0	5	0	0	0	5	1	2	12	2	0	7		
14. North Dakota..	0	6	9	3	0	0	11	4	1	0	0	0	2	0	0	0	12	2	0	3	1	0	14		
15. Ohio.....	10	50	86	28	6	0	140	26	5	0	0	0	8	1	0	0	110	25	6	31	8	0	126		
16. Oklahoma.....	0	1	49	1	0	0	25	4	0	0	0	0	22	0	0	0	1	2	2	39	7	0	11		
17. South Dakota...	0	7	14	5	0	0	21	2	0	0	0	0	3	0	0	0	5	1	1	16	3	0	10		
18. West Virginia..	1	30	48	3	0	0	69	9	1	0	0	0	3	0	0	0	0	3	2	64	13	0	19		
19. Wisconsin.....	0	15	24	13	5	0	52	3	0	0	0	0	2	0	0	0	11	16	15	13	2	4	14		
20. Wyoming.....	0	3	11	1	0	0	15	0	0	0	0	0	0	0	0	0	2	1	1	10	1	0	2		
TOTALS 1947..	24	287	596	226	72	2	851	173	16	0	9	0	138	11	0	5	368	134	94	749	130	68	547	568	



TABLE II (Continued)

SUMMER SESSION																								
STATE	Number of Schools Maintaining	Length in Days						Minutes in Class Period										No. of Clock Hours for Each Unit						
		Non-Laboratory Subjects						Laboratory Subjects																
		20 to 29	30 to 39	40 to 49	50 to 59	60 or more	Less than 40	41 to 60	61 to 80	81 to 100	101 to 120	121 or more	Less than 40	41 to 60	61 to 80	81 to 100	101 to 120	121 or more	Less than 100	100 to 109	110 to 119	120 to 129	130 to 139	140 or more
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Arkansas.....	17	0	12	2	3	0	10	0	2	3	0	0	0	0	0	0	0	1	3	0	13	1	0	0
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Illinois.....	15	0	8	6	0	1	0	2	0	7	3	3	0	1	0	1	2	11	2	0	0	1	1	0
5. Indiana.....	15	0	4	9	0	2	0	3	1	4	6	1	0	2	0	4	1	0	4	0	0	6	0	5
6. Iowa.....	3	1	2	0	0	0	0	0	2	0	1	0	0	0	2	0	1	0	1	0	0	2	0	0
7. Kansas.....	4	0	1	3	0	0	3	0	0	1	0	0	2	1	0	1	0	1	0	0	1	2	1	3
8. Michigan.....	7	0	4	2	0	1	0	2	0	3	0	1	0	2	0	0	0	2	2	0	0	1	1	3
9. Minnesota.....	3	0	2	1	0	0	0	0	0	1	1	1	0	0	0	1	1	0	1	0	0	0	2	0
10. Missouri.....	3	0	2	1	0	0	0	2	0	0	1	0	0	1	0	0	2	0	0	0	3	0	0	0
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Nebraska.....	1	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1
13. New Mexico.....	2	0	0	2	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	0	0	1
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio.....	6	0	2	4	0	0	1	0	2	2	1	0	0	0	0	0	0	1	0	0	4	0	0	2
16. Oklahoma.....	11	0	2	9	0	0	6	0	3	0	2	0	3	0	2	0	1	3	0	0	1	3	4	0
17. South Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18. West Virginia.....	3	0	2	1	0	0	1	0	1	0	1	0	1	0	1	0	1	3	0	0	0	0	0	0
19. Wisconsin.....	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS, 1947..	91	1	41	42	3	4	0	32	3	24	17	14	0	13	3	10	8	18	21	0	43	8	19	0

TABLE II (Continued)

LIBRARIANS			SALARIES—ADMINISTRATORS															
STATE	Total No. Full-Time	Total No. Part-Time	Semester Hours of Training In Library Science				Superintendents—Public Schools											
			24 or more	16 to 23	6 to 15	0 to 5	1750 to 1999	2000 to 2249	2250 to 2749	2750 to 2999	3000 to 3499	3500 to 4099	4100 to 4999	5000 to 5499	5500 to 6099	6100 to 6999	7000 to 7499	7500 or more
			10	15	20	25	10	15	20	25	30	35	40	45	50	55	60	65
1. Arizona.....	10	15	7	2	3	13	0	0	0	0	1	0	2	2	3	0	0	0
2. Arkansas.....	7	60	3	5	13	46	0	0	1	0	0	7	12	7	3	0	0	0
3. Colorado.....	13	64	6	4	10	57	0	1	0	1	2	6	7	4	2	1	0	0
4. Illinois.....	60	102	43	20	53	46	0	0	0	0	0	5	2	3	1	0	1	0
5. Indiana.....	15	66	38	20	6	17	0	0	0	0	0	3	4	5	0	0	0	0
6. Iowa.....	21	68	9	1	22	57	0	0	0	1	0	5	8	12	2	0	0	0
7. Kansas.....	32	42	8	7	24	35	0	0	0	0	2	10	7	2	0	0	0	0
8. Michigan.....	38	86	15	9	27	73	0	0	0	0	7	13	22	8	3	3	0	0
9. Minnesota.....	33	30	28	7	28	0	0	0	0	0	0	2	4	7	8	2	1	0
10. Missouri.....	30	39	7	4	28	30	0	0	0	2	1	12	6	4	1	0	0	0
11. Montana.....	1	8	1	1	2	5	0	0	0	0	0	0	2	2	0	0	0	0
12. Nebraska.....	9	41	3	3	9	35	0	0	0	0	5	17	10	0	0	0	0	0
13. New Mexico....	14	30	10	0	7	27	0	0	0	0	0	2	1	3	0	0	0	0
14. North Dakota...	4	14	1	0	13	4	0	0	0	0	1	8	2	1	0	0	0	0
15. Ohio.....	61	131	44	9	43	96	0	0	1	2	17	30	11	5	1	0	0	0
16. Oklahoma.....	16	43	4	3	16	36	0	0	0	0	2	8	7	3	1	0	0	0
17. South Dakota...	6	23	1	3	10	15	0	0	1	1	2	12	1	0	0	0	0	0
18. West Virginia...	30	73	10	10	46	37	0	0	0	0	0	0	0	0	0	0	0	0
19. Wisconsin.....	16	53	6	1	37	25	0	0	0	0	1	9	8	9	2	0	0	0
20. Wyoming.....	3	18	3	2	4	12	0	0	0	0	1	3	1	0	0	0	0	0
TOTALS, 1947..	419	1,006	247	111	401	666	0	1	2	6	67	153	128	71	23	4	0	0
							0	1	8	37	75	225	166					

TABLE II (Continued)

SALARIES—ADMINISTRATORS (Continued)																																
STATE		Principals—Public Schools (Continued)										Superintendents—Private Schools															Private School Principals					
		4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499	1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 2999	3000 to 3499	3500 to 3999	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499	
1. Arizona.....	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3. Colorado.....	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4. Illinois.....	14	13	6	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Indiana.....	5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Iowa.....	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Kansas.....	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. Michigan.....	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
9. Minnesota.....	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. Missouri.....	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11. Montana.....	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Nebraska.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13. New Mexico.....	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14. North Dakota..	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio.....	9	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
16. Oklahoma.....	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17. South Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18. West Virginia..	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19. Wisconsin.....	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. Wyoming.....	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS, 1947..	55	24	17	3	3	2	0	0	2	0	0	0	0	1	1	0	0	1	1	0	1	0	0	0	2	0	1	5	89	1	0	0



TABLE II (Continued)

SALARIES—ADMINISTRATORS (Continued)													TOTAL NUMBER OF ADMINISTRATORS			NUMBER OF YEARS ADMINISTRATORS HAVE HELD PRESENT POSITION													
STATE	Principals—Private Schools (Continued)													Total Public Schools		Total Private Schools		Less than 1 yr.	1	2	3	4	5	6 to 10	11 to 15	16 to 20	21 or more		
	1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 2999	3000 to 3499	3500 to 3999	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	Supt.	Prin.											Supt.	Prin.
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	5	2	2	3	1	1	1				
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	3	4	0	8	6	4	2	2				
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	14	0	6	3	2	3	3	9	1				
4. Illinois.....	0	0	0	0	1	0	1	0	0	3	0	0	0	0	0	12	93	2	36	10	17	13	19	20	16				
5. Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	50	0	1	8	3	5	2	13	7				
6. Iowa.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	28	0	7	13	16	6	5	6	5				
7. Kansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	38	0	1	3	8	7	8	5	14				
8. Michigan.....	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	59	37	1	12	9	6	10	9	12	5				
9. Minnesota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	27	0	6	3	14	10	3	8	4				
10. Missouri.....	1	0	0	0	0	0	0	1	1	0	1	0	0	0	2	26	33	1	18	11	2	15	13	6	3				
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0	1	0	2	0	0				
12. Nebraska.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	9	0	3	0	9	9	7	3	4				
13. New Mexico...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	16	0	0	1	5	2	2	2	4				
14. North Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	4	2	0	3	4	1	0	2	0				
15. Ohio.....	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	67	99	4	10	19	20	15	18	11	10				
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	30	0	0	10	5	6	2	6	4				
17. South Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	7	0	1	0	3	4	1	3	1				
18. West Virginia..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	1	0	1	0	12	9	5	2	4				
19. Wisconsin.....	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	29	18	3	7	9	5	6	0	3	4				
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	0	0	1	1	5	3	1	0				
TOTALS 1947..	1	0	0	0	2	1	2	1	4	0	4	2	0	0	2	465	617	14	109	119	129	141	112	93	85				

TABLE II (Continued)

## SALARIES—FULL-TIME TEACHERS

STATE	Public Schools—Men												Public Schools—Women													
	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	To- tal	Less than 999	1000 to 1999	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	To- tal
1. Arizona.....	0	0	0	0	0	1	3	19	29	30	23	23	128	0	0	0	1	0	6	10	21	29	26	16	7	116
2. Arkansas.....	0	0	3	13	3	19	9	8	24	20	4	32	135	4	5	45	122	46	30	18	4	2	0	2	0	271
3. Colorado.....	0	0	1	0	10	26	43	42	49	10	10	7	108	0	0	0	7	35	119	64	10	8	1	0	6	251
4. Illinois.....	0	0	0	0	2	6	57	76	124	109	104	120	598	0	0	1	6	23	139	274	235	117	45	24	35	899
5. Indiana.....	0	0	0	2	3	15	33	69	95	64	44	62	387	0	0	1	0	5	57	110	128	55	32	19	19	426
6. Iowa.....	0	0	0	3	2	4	20	49	81	88	63	94	404	1	2	3	6	12	104	212	84	22	18	9	5	568
7. Kansas.....	0	0	0	1	0	5	20	40	77	99	43	75	360	0	1	5	4	42	96	159	95	16	9	7	1	435
8. Michigan.....	0	0	0	0	3	13	42	90	127	114	61	85	535	1	2	3	8	22	133	197	124	42	22	9	13	576
9. Minnesota.....	0	0	1	0	0	2	15	51	54	74	49	34	280	0	0	0	1	2	114	157	76	20	30	6	10	416
10. Missouri.....	1	0	1	5	25	29	29	39	49	43	22	24	207	2	6	20	116	129	113	47	22	0	7	1	0	463
11. Montana.....	0	0	0	0	0	1	1	7	5	11	9	5	39	0	0	0	0	1	8	22	14	9	1	0	0	55
12. Nebraska.....	0	0	0	0	0	1	12	28	44	31	36	46	198	0	0	1	2	8	65	162	41	5	0	0	0	284
13. New Mexico.....	0	0	0	0	0	3	10	8	22	22	23	46	134	1	0	1	1	0	13	34	47	48	33	6	0	184
14. North Dakota..	0	0	0	0	0	0	3	6	17	32	8	15	81	0	0	0	1	9	31	43	17	0	0	0	0	101
15. Ohio.....	0	0	0	1	16	84	154	192	179	150	81	91	948	0	0	4	21	164	394	308	149	73	39	21	11	1,094
16. Oklahoma.....	0	0	0	2	32	39	27	24	27	16	8	47	222	0	0	13	21	133	110	60	13	10	10	7	1	378
17. South Dakota..	0	0	0	0	0	0	7	20	44	32	15	14	132	0	0	0	0	10	45	75	20	8	0	0	0	167
18. West Virginia..	0	3	14	58	122	84	55	32	14	9	8	4	403	0	7	59	172	192	136	36	17	13	2	3	0	637
19. Wisconsin.....	0	0	0	0	1	5	31	31	63	68	40	49	288	0	1	1	0	11	119	97	52	27	6	3	3	320
20. Wyoming.....	0	0	0	0	0	1	4	7	11	20	16	12	71	1	0	0	0	0	3	24	39	21	5	0	0	93
TOTALS, 1947...	1	3	20	85	219	338	575	838	1,135	1,042	667	885	5,805	10	24	158	489	844	1,835	2,109	1,217	525	286	133	111	7,741

TABLE II (Continued)

STATE		SALARIES—FULL-TIME TEACHERS (Cont.)																											TOTAL FULL-TIME TEACHERS	
		Private Schools—Men													Private Schools—Women															
		Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total			
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	244	0		
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	23	7	1	0	4	0	0	0	0	0	0	0	0	0	413	7		
3. Colorado.....	17	1	0	1	1	2	0	0	1	0	0	0	23	47	1	0	4	0	0	0	0	0	0	0	0	0	52	449	75	
4. Illinois.....	0	0	0	0	0	1	1	6	9	9	13	9	64	0	0	2	2	3	4	5	9	4	0	0	0	0	29	1,497	93*	
5. Indiana.....	10	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	813	10		
6. Iowa.....	15	9	7	0	0	0	0	1	0	2	0	1	35	0	3	0	0	1	1	0	0	0	0	0	0	0	5	972	40	
7. Kansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8	795	8		
8. Michigan.....	0	0	0	0	0	1	0	1	1	4	12	4	7	30	28	0	0	0	1	1	4	3	3	3	13	56	1,111	86*		
9. Minnesota.....	0	0	0	0	0	0	0	3	0	5	3	0	2	13	0	0	1	2	0	2	7	0	1	1	0	14	696	27		
10. Missouri.....	36	0	2	10	0	10	6	21	10	4	4	27	130	87	3	5	0	4	1	2	3	2	3	1	6	117	730	247		
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	0		
12. Nebraska.....	20	0	0	0	0	0	0	0	0	0	0	0	20	21	0	0	0	0	0	0	0	0	0	0	0	21	482	41		
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318	0		
14. North Dakota.....	0	0	0	0	0	0	1	0	1	0	0	0	2	7	0	0	3	1	0	0	0	0	0	0	0	0	11	182	13	
15. Ohio.....	0	0	0	0	0	1	0	3	4	8	7	30	53	3	2	3	13	2	7	6	1	6	2	6	5	56	2,042	109		
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	600	0		
17. South Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13	299	13		
18. West Virginia.....	0	0	0	0	0	0	0	0	6	3	5	1	15	0	0	1	0	0	0	0	0	0	0	0	0	1	1,040	16		
19. Wisconsin.....	28	1	0	0	0	1	3	1	8	16	7	18	83	49	1	0	0	1	5	7	4	2	10	3	5	87	608	170		
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164	0		
TOTALS, 1947..	126	11	9	11	3	15	21	41	61	33	100	478	478	270	10	14	21	13	19	23	28	17	19	14	29	477	13,549	955*		

\* Not all schools reported.



TABLE II (Continued)

STATE	NUMBER OF SCHOOLS WITH PUPIL-TEACHER RATIO OF:										AVERAGE NUMBER CLASSES DAILY PER TEACHER							NUMBER OF PUPILS ENROLLED FOR FIVE OR MORE UNITS						PERCENT OF TOTAL ENROLLMENT IN EACH GRADE											
	14.0		16.0		18.0		20.0		22.0		24.0		26.0		28.0		30.0		Less than 3	3	3.9	4	5	6	7 or more	9	10	11	12	Total	9	10	11	12	Total
	to 14.0	to 16.0	to 18.0	to 20.0	to 22.0	to 24.0	to 26.0	to 28.0	to 30.0	Over 30																									
1. Arizona.....	0	14.1	16.1	18.1	20.1	22.1	24.1	26.1	28.1	30.1	0	0	0	0	0	0	0	0	52	78	101	118	183	189	542	2.9	6.9	13.8	16.2	9.1					
2. Arkansas.....	1	2	2	4	6	10	7	5	1	0	0	0	5	22	10	1	78	191	218	199	686	3.8	7.1	9.2	9.7	7.5									
3. Colorado.....	0	8	1	8	10	6	6	3	2	0	1	0	9	16	16	2	216	368	389	400	1,373	6.2	9.9	11.9	13.9	10.3									
4. Illinois.....	10	16	20	36	26	23	9	3	0	0	2	4	28	73	33	3	269	483	871	964	2,587	2.5	5.2	9.1	12.6	7.1									
5. Indiana.....	3	7	10	10	18	13	6	0	1	0	0	2	6	43	15	2	123	325	405	447	1,360	2.	6.	10.	11.	7.									
6. Iowa.....	4	10	23	26	14	6	0	0	0	0	1	2	30	38	10	2	33	105	265	441	844	.6	1.5	4.1	7.5	3.2									
7. Kansas.....	4	8	13	19	11	2	2	0	1	0	0	1	15	38	5	1	222	483	748	576	2,029	5.6	9.7	16.5	14.7	11.7									
8. Michigan.....	3	5	2	14	27	20	18	6	5	0	0	1	17	52	20	10	282	675	980	971	2,017	4.	7.	12.	13.	8.									
9. Minnesota.....	7	9	10	10	12	6	3	0	0	0	2	4	19	31	1	0	1,107	525	629	721	2,982	11.	8.	12.	15.	17.3									
10. Missouri.....	5	4	7	12	15	18	7	7	2	1	2	3	17	40	16	0	67	264	342	414	1,087	1.2	3.9	5.9	7.2	4.2									
11. Montana.....	0	1	1	3	2	1	1	0	0	0	0	0	0	8	1	0	1	24	53	75	153	.2	4.1	9.8	14.9	6.8									
12. Nebraska.....	1	2	10	7	11	6	4	1	2	0	0	1	14	22	7	0	51	132	384	361	928	1.6	3.8	11.8	12.3	7.1									
13. New Mexico.....	0	2	6	5	4	4	1	0	0	0	0	1	4	13	4	0	20	73	139	153	385	1.2	3.7	8.3	11.1	5.7									
14. North Dakota.....	1	1	1	2	3	3	5	2	0	0	0	1	6	11	1	0	16	119	106	89	330	1.4	8.7	8.6	7.9	6.5									
15. Ohio.....	5	14	20	28	49	34	18	8	4	0	1	2	13	49	71	44	262	619	1,073	1,069	3,023	2.2	5.9	9.5	10.7	5.4									
16. Oklahoma.....	1	1	3	5	15	16	5	3	1	1	0	1	8	36	5	0	18	231	427	492	1,168	.7	5.	9.	12.	7.									
17. South Dakota.....	1	4	7	5	7	0	2	0	0	0	0	0	11	13	2	0	1	37	78	120	236	.05	1.	4.	7.	3.1									
18. West Virginia.....	0	1	4	4	9	22	20	15	4	3	0	0	4	58	20	0	411	535	632	622	2,200	6.6	8.7	12.3	14.2	10.1									
19. Wisconsin.....	6	4	10	11	10	11	3	1	1	0	0	5	12	30	10	0	372	678	794	607	2,451	8.5	13.9	16.9	14.1	13.4									
20. Wyoming.....	0	3	3	2	4	3	0	0	0	0	0	0	1	10	4	0	18	70	148	135	361	1.7	7.5	15.8	15.2	9.6									
TOTALS, 1947.....	52	104	154	217	260	217	118	54	24	5	9	28	219	668	275	66	3,619	6,055	8,933	9,035	27,642	4.4	6.4	10.4	11.8	8.1									

TABLE II (Concluded)

STATE	NEW STAFF MEMBERS			DEGREES AND PROFESSIONAL TRAINING (NEW TEACHERS)										EXPERIENCE (NEW TEACHERS)													
				Men					Women					Men					Women								
				PhD	MA	BA	No BA	Less than 15 hrs. Educ.	PhD	MA	BA	No BA	Less than 15 hrs. Educ.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 yrs.	Less than 1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 yrs.	
1. Arizona.....	54	51	105	0	21	32	1	2	0	13	36	2	1	13	1	15	5	6	18	7	3	2	4	4	5	6	
2. Arkansas.....	78	108	186	0	15	57	6	9	0	8	87	13	13	16	11	6	9	1	5	45	10	3	5	5	7	33	
3. Colorado.....	137	137	274	0	21	105	11	16	0	15	111	11	13	48	21	15	7	5	34	42	17	15	13	9	3	38	
4. Illinois.....	201	351	642	0	85	199	7	10	1	51	285	14	19	105	27	26	28	20	11	74	127	30	31	27	20	12	
5. Indiana.....	167	138	305	1	38	128	0	2	0	21	116	1	0	69	7	8	13	8	6	56	50	9	13	11	10	4	
6. Iowa.....	255	249	504	1	55	198	1	11	0	29	216	4	19	61	27	23	24	21	11	88	97	15	27	12	20	15	
7. Kansas.....	180	156	336	0	36	139	5	4	0	13	135	8	7	54	19	17	12	17	12	49	50	16	15	18	5	6	
8. Michigan.....	225	291	516	3	50	168	4	1	1	27	252	11	7	75	19	23	22	13	7	66	107	32	24	18	11	13	
9. Minnesota.....	165	201	366	0	38	122	5	0	0	12	185	4	1	35	22	15	15	14	4	60	56	16	10	24	11	8	
10. Missouri.....	175	203	378	2	36	130	7	11	1	24	166	12	10	53	26	20	10	14	7	45	79	17	16	13	15	7	
11. Montana.....	25	23	48	0	1	22	2	3	0	1	21	1	1	7	2	1	2	1	0	12	4	2	3	2	4	2	
12. Nebraska.....	113	97	210	0	27	84	2	5	0	6	85	6	4	40	11	9	6	10	3	34	39	7	4	6	6	29	
13. New Mexico...	70	76	146	0	14	53	3	6	0	12	64	0	2	20	8	7	2	3	22	16	4	9	10	7	5	25	
14. North Dakota...	34	39	73	2	2	30	0	0	0	1	37	1	0	16	1	5	1	2	0	9	9	4	3	3	4	3	
15. Ohio.....	454	395	849	2	84	353	15	8	0	48	332	15	10	155	44	36	24	30	27	138	141	30	35	22	24	16	
16. Oklahoma.....	149	143	292	0	44	102	3	4	0	24	117	2	4	26	11	6	13	15	14	64	26	15	13	14	13	49	
17. South Dakota...	65	76	141	0	12	52	1	0	0	3	69	4	2	20	5	12	3	5	2	18	25	8	10	6	5	3	
18. West Virginia..	170	127	297	0	37	121	12	14	0	10	105	12	6	85	17	9	7	6	10	36	46	28	7	9	7	23	
19. Wisconsin.....	147	149	296	1	28	116	2	3	0	11	138	0	3	74	8	14	8	10	4	29	72	14	17	10	7	6	
20. Wyoming.....	37	46	83	0	8	28	1	3	0	4	39	3	3	10	3	5	4	0	3	12	11	6	8	1	5	1	
TOTALS, 1947..	2,991	3,056	6,047	12	652	2,239	88	112	3	333	2,596	124	125	990	292	261	221	201	135	891	1,060	293	275	226	192	139	871

TABLE III

SUMMARY OF THE 1946-47 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING 500 TO 999 PUPILS

STATE	TOTAL NUMBER SCHOOLS		ENROLLMENT DATA											Total Number En- rolled	Aver- age Per School	GRADUATES			
			In Schools Reporting on Upper							By Grades						Special	Boys	Girls	Total
Public	Private	Total	3 yrs.	4 yrs.	5 yrs.	6 yrs.	7	8	9	10	11	12							
1. Arizona.....	5	0	5	0	3,170	0	6,538	0	0	1,045	826	698	594	7	3,170	634	187	261	448
2. Arkansas.....	17	0	17	2,321	1,430	563	6,538	1,267	1,326	1,805	2,541	2,034	1,878	1	10,852	638.3	609	979	1,678
3. Colorado.....	12	0	12	3,790	3,698	0	798	169	123	1,237	2,581	2,287	1,871	18	8,286	690.5	868	975	1,843
4. Illinois.....	46	22	68	2,115	47,433	0	0	0	0	13,178	13,099	12,597	10,541	133	49,548	728.6	4,333	4,914	9,247
5. Indiana.....	41	1	42	4,686	16,813	930	7,449	1,010	1,209	6,446	8,022	6,982	6,053	136	29,878	711.4	3,249	3,168	6,417
6. Iowa.....	22	1	23	8,260	7,728	0	680	115	110	2,091	5,171	4,765	4,186	230	16,668	724.7	1,884	1,944	3,828
7. Kansas.....	22	2	24	6,179	3,174	0	6,078	991	1,050	1,951	4,195	3,730	3,477	37	15,431	642.9	1,269	1,638	2,907
8. Michigan.....	48	2	50	9,910	13,887	570	9,301	1,413	1,392	6,072	9,374	8,148	7,101	168	33,668	673.4	3,019	3,614	6,633
9. Minnesota.....	18	5	23	9,427	7,816	0	0	0	0	1,906	5,569	5,151	4,569	48	17,243	749.7	1,915	2,256	4,171
10. Missouri.....	16	5	21	3,976	8,927	922	1,316	206	414	2,764	4,160	3,915	3,584	98	15,141	721.	1,476	1,730	3,206
11. Montana.....	4	0	4	0	2,751	0	0	0	0	790	700	685	561	15	2,751	687.7	244	312	556
12. Nebraska.....	8	0	8	1,888	2,860	0	966	120	129	801	1,689	1,612	1,353	10	5,714	714.2	270	325	595
13. New Mexico....	6	0	6	1,707	776	0	1,313	279	227	496	1,052	942	789	11	3,796	632.7	278	348	626
14. North Dakota..	3	0	3	2,204	0	0	0	0	0	0	829	712	663	0	2,204	734.7	287	377	664
15. Ohio.....	76	8	84	9,646	24,508	1,966	24,723	3,831	4,194	12,028	15,006	13,523	12,048	123	60,843	724.3	5,138	6,243	11,381
16. Oklahoma.....	15	0	15	4,479	5,368	0	0	0	0	1,551	2,860	2,837	2,449	150	9,847	656.5	957	1,148	2,105
17. South Dakota...	2	0	2	1,532	0	0	0	0	0	0	554	529	431	18	1,532	766.	174	246	420
18. West Virginia...	45	0	45	4,865	9,465	0	17,413	3,158	2,856	6,348	7,586	6,207	5,470	109	31,734	795.2	916	1,200	2,116
19. Wisconsin.....	37	8	45	9,047	15,542	690	5,663	530	681	5,569	8,438	8,175	7,417	132	30,942	687.6	2,875	3,668	6,543
20. Wyoming.....	3	0	3	0	1,484	0	859	147	153	560	536	486	448	13	2,343	781.	182	257	439
TOTALS, 1947..	446	54	500	86,023	176,830	5,641	83,097	13,236	13,864	66,638	94,878	86,015	75,483	1,477	351,591	703.2	39,220	35,603	65,823
1946..	433	45	478	78,958	165,074	7,006	85,972	13,450	14,665	66,926	94,352	79,524	66,564	1,520	337,010	705.	27,155	37,029	64,184
1945..	402	45	447	74,672	155,695	3,835	79,441	13,043	13,049	64,546	86,540	72,960	62,395	1,110	313,643	701.	26,226	33,740	59,966
1944..	417	42	459	79,272	148,950	2,888	91,108	14,894	14,805	63,600	87,393	75,458	64,951	1,117	322,218	702.	31,440	37,340	68,780
1943..	Totals not comparable—data from one state lacking																		



TABLE III (Continued)

STATE	DAYS TAUGHT IN 1945-46					UNITS FOR GRADUATION							MINUTES IN CLASS PERIOD													
						FOUR-YEAR SCHOOLS				THREE-YEAR SCHOOLS			NON-LABORATORY SUBJECTS						LABORATORY SUBJECTS							
						Less than 16	16	17	18	19	20 or more	Less than 12	12	13	14	15 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more
1. Arizona.....	1	2	1	1	0	0	3	1	1	0	0	0	0	0	0	0	0	1	1	0	0	3	2	2		
2. Arkansas.....	0	5	11	1	0	0	14	0	0	0	0	0	3	0	0	0	2	6	1	8	0	1	0	4	12	
3. Colorado.....	0	1	3	7	1	0	6	1	0	0	0	0	3	2	0	0	1	0	2	7	2	0	0	2	7	3
4. Illinois.....	3	6	20	16	23	0	61	3	1	0	0	0	2	1	0	0	32	3	2	14	17	1	0	0	16	51
5. Indiana.....	1	5	21	6	9	0	32	4	0	0	0	0	6	0	0	0	3	2	14	22	1	0	0	14	21	7
6. Iowa.....	0	3	11	5	4	0	10	0	0	0	2	0	9	0	0	2	1	1	4	9	8	0	0	4	8	11
7. Kansas.....	0	2	15	7	0	0	11	3	0	0	0	0	6	2	1	1	0	0	1	13	10	0	0	1	12	11
8. Michigan.....	0	1	10	28	11	1	32	4	0	0	0	0	11	0	0	2	4	9	6	30	1	1	2	4	32	11
9. Minnesota.....	0	15	6	2	0	0	10	0	0	0	0	0	13	0	0	0	1	2	0	17	3	0	0	0	17	6
10. Missouri.....	0	1	12	4	4	0	1	14	1	0	0	0	0	4	0	1	2	3	3	12	1	0	1	2	12	6
11. Montana.....	0	2	2	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0
12. Nebraska.....	0	0	6	2	0	0	5	0	0	0	0	0	3	0	0	0	1	0	1	4	2	0	0	1	4	3
13. New Mexico...	0	1	2	3	0	0	3	0	0	0	0	0	3	0	0	0	0	1	0	4	1	0	1	0	4	1
14. North Dakota..	0	0	3	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	2	1	0	0	2	1	1
15. Ohio.....	7	11	37	27	2	0	59	13	3	0	0	0	9	0	0	0	52	7	0	23	2	0	0	0	26	58
16. Oklahoma.....	0	1	13	1	0	0	5	3	0	0	0	0	7	0	0	0	0	0	1	9	5	0	0	1	9	5
17. South Dakota..	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	0	0	1	1
18. West Virginia..	0	10	33	2	0	0	33	5	0	0	0	0	4	3	0	0	0	0	1	37	7	0	0	0	34	11
19. Wisconsin.....	0	3	18	13	11	1	29	3	0	0	0	0	9	2	0	1	7	8	19	9	2	3	4	19	8	10*
20. Wyoming.....	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1
TOTALS, 1947..	12	71	226	126	65	2	320	55	6	0	2	0	91	16	1	7	106	43	56	229	66	6	8	49	225	211*

\* Not all schools reported.

TABLE III (Continued)

SUMMER SESSION																															
STATE	Number of Schools Maintaining	Length in Days					Minutes in Class Period										No. of Clock Hours for Each Unit														
							Non-Laboratory Subjects					Laboratory Subjects																			
		20 to 29	30 to 39	40 to 49	50 to 59	60 or more	Less than 40	41 to 60	61 to 80	81 to 100	101 to 120	121 or more	Less than 40	41 to 60	61 to 80	81 to 100	101 to 120	121 or more	Less than 100	100 to 109	110 to 119	120 to 129	130 to 139	140 or more							
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
2. Arkansas.....	11	0	6	0	0	5	0	4	1	1	5	0	0	0	1	1	2	1	0	0	0	9	1	1							
3. Colorado.....	2	0	1	1	0	0	0	0	1	1	0	0	0	0	1	1	2	6	2	0	0	0	0	1							
4. Illinois.....	23	0	15	7	1	0	0	2	5	7	6	3	0	0	1	1	2	6	2	0	0	20	0	1							
5. Indiana.....	26	0	5	21	0	0	0	4	1	10	10	1	0	3	0	5	9	0	13	0	0	5	5	3							
6. Iowa.....	8	1	1	5	0	1	1	1	1	2	2	1	0	1	0	2	1	1	4	0	0	1	0	3							
7. Kansas.....	9	0	2	5	1	1	0	1	0	3	3	2	0	1	0	0	3	2	4	0	0	2	1	2							
8. Michigan.....	9	1	3	4	1	0	0	2	0	2	4	1	0	1	0	0	0	0	0	0	0	5	0	4							
9. Minnesota.....	6	1	4	0	0	1	0	3	1	0	1	1	0	2	0	1	0	2	0	0	0	1	0	3							
10. Missouri.....	4	0	2	1	1	0	0	1	0	0	3	0	3	1	0	0	0	1	1	0	1	0	1	1							
11. Montana.....	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0							
12. Nebraska.....	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0							
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15. Ohio.....	29	0	15	14	0	0	0	4	1	11	10	3	0	0	3	0	0	0	0	1	0	24	4	0							
16. Oklahoma.....	9	0	0	8	0	1	0	2	0	1	3	3	0	2	0	0	1	2	2	0	0	0	0	7							
17. South Dakota.....	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1							
18. West Virginia.....	13	0	4	7	0	2	0	3	0	2	4	4	0	0	0	0	3	1	1	0	2	5	5	5							
19. Wisconsin.....	6	0	4	2	0	0	0	0	1	1	2	0	0	0	1	0	1	0	3	1	0	0	0	2							
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
TOTALS, 1947..	158	3	64	76	4	11	1	28	12	42	54	19	3	12	7	11	23	13	34	2	1	71	17	33							

TABLE III (Continued)

SALARIES—ADMINISTRATORS											
LIBRARIANS				Superintendents—Public Schools							
STATE	Total No. Full-Time	Total No. Part-Time	Semester Hours of Training In Library Science				Principals—Public Schools				
			24 or more	16 to 23	6 to 15	0 to 5	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 3000
							1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 3000
1. Arizona.....	5	0	1	0	4	0	0	0	0	0	0
2. Arkansas.....	11	8	3	3	4	0	0	0	0	0	0
3. Colorado.....	8	3	7	1	0	0	0	0	0	0	0
4. Illinois.....	64	20	50	6	20	8	0	0	0	0	0
5. Indiana.....	36	8	36	6	2	0	0	0	0	0	0
6. Iowa.....	20	13	11	4	5	13	0	0	0	0	0
7. Kansas.....	26	2	9	3	12	4	0	0	0	0	0
8. Michigan.....	38	35	18	8	11	36	0	0	0	0	0
9. Minnesota.....	22	5	20	2	5	0	0	0	0	0	0
10. Missouri.....	20	9	13	3	8	5	0	0	0	0	0
11. Montana.....	4	2	2	1	1	2	0	0	0	0	0
12. Nebraska.....	6	3	3	0	1	5	0	0	0	0	0
13. New Mexico.....	4	2	1	3	0	2	0	0	0	0	0
14. North Dakota.....	3	0	2	0	1	0	0	0	0	0	0
15. Ohio.....	82	30	57	8	15	32	0	0	0	0	0
16. Oklahoma.....	12	3	7	1	7	0	0	0	0	0	0
17. South Dakota.....	1	2	2	0	0	1	0	0	0	0	0
18. West Virginia.....	42	7	14	9	16	6	0	0	0	0	0
19. Wisconsin.....	40	16	19	7	22	8	0	0	0	0	0
20. Wyoming.....	3	0	3	0	0	0	0	0	0	0	0
TOTALS, 1947..	447	168	282	65	134	134	0	0	0	0	0



TABLE III (Continued)

SALARIES—ADMINISTRATORS (Continued)																																												
STATE	Principals—Public Schools (Continued)										Superintendents—Private Schools										Private School Principals																							
	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499	1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 3000	3000 to 3249	3250 to 3499	3500 to 3749	3750 to 4000	4000 to 4249	4250 to 4499	4500 to 4749	4750 to 4999	5000 to 5249	5250 to 5499	5500 to 5749	5750 to 5999	6000 to 6249	6250 to 6499	6500 to 6749	6750 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499						
1. Arizona.....	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
2. Arkansas.....	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3. Colorado.....	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4. Illinois.....	10	5	11	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5. Indiana.....	9	7	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6. Iowa.....	9	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7. Kansas.....	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8. Michigan.....	12	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9. Minnesota.....	3	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10. Missouri.....	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11. Montana.....	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12. Nebraska.....	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13. New Mexico.....	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14. North Dakota.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Ohio.....	11	8	4	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16. Oklahoma.....	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17. South Dakota.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18. West Virginia.....	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19. Wisconsin.....	5	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20. Wyoming.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS, 1947..	92	53	37	3	2	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE III (Continued)

STATE		SALARIES—ADMINISTRATORS (Continued)																TOTAL NUMBER OF ADMINISTRATORS				NUMBER OF YEARS ADMINISTRATORS HAVE HELD PRESENT POSITION											
		Principals—Private Schools (Continued)																Total Public Schools				Total Private Schools		Less than 1 yr.	1	2	3	4	5	6 to 10	11 to 15	16 to 20	21 to more
																		Supt.		Prin.		Supt.	Prin.										
		1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 3000	3000 to 3249	3250 to 3499	3500 to 3749	3750 to 4000	4000 to 4249	4250 to 4499	4500 to 4749	4750 to 5000	5000 to 5249	5250 to 5499	5500 to 5749	5750 to 6000	6000 to 6249	6250 to 6499			6499 to 6999	6999 to 7499	7500 or more							
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
4. Illinois.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
5. Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
6. Iowa.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
7. Kansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
8. Michigan.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
9. Minnesota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
10. Missouri.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
12. Nebraska.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
15. Ohio.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
17. South Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
18. West Virginia.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
19. Wisconsin.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
TOTALS, 1947.....		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

TABLE III (Continued)



TABLE III (Continued)

STATE		SALARIES—FULL-TIME TEACHERS (Continued)																										TOTAL FULL-TIME TEACHERS		
		Private Schools—Men													Private Schools—Women															
		Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total			
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115	0
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	348	0
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	286	0
4. Illinois.....	0	0	0	2	0	11	21	13	9	5	6	9	76	0	0	0	11	8	10	10	5	4	0	0	0	0	0	48	1,384	124*
5. Indiana.....	0	0	0	0	0	0	1	2	4	5	8	21	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,011	41
6. Iowa.....	14	0	0	0	0	0	3	1	2	0	0	0	20	0	0	0	0	3	0	0	0	0	0	0	0	0	3	633	23	
7. Kansas.....	0	1	0	0	0	1	0	0	1	1	10	4	3	38	0	0	3	0	0	0	0	0	0	0	0	0	41	519	46	
8. Michigan.....	0	0	0	0	0	0	1	0	1	0	1	3	19	0	0	0	1	5	2	0	1	0	0	0	2	0	11	982	30	
9. Minnesota.....	0	0	0	1	0	1	0	3	0	12	9	1	27	0	0	0	6	1	1	1	1	0	0	0	0	9	500	36		
10. Missouri.....	45	1	0	0	0	0	4	3	1	0	2	1	57	59	0	1	4	1	2	1	0	0	0	0	0	68	447	125		
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	0	
12. Nebraska.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	191	0	
13. New Mexico...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141	0	
14. North Dakota...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93	0	
15. Ohio.....	0	0	3	1	0	4	0	6	0	0	9	11	34	0	0	3	8	0	1	0	0	0	0	0	0	12	2,060	46		
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	342	0	
17. South Dakota...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	0	
18. West Virginia...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,141	0	
19. Wisconsin.....	47	2	0	0	0	2	1	6	8	3	1	1	72	120	1	1	6	2	3	2	1	0	0	0	0	136	930	208		
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	0	
TOTALS, 1947..	106	4	3	4	3	17	39	33	33	31	31	47	351	217	1	5	39	20	19	14	7	4	0	2	0	328	11,361	679*		

\* Not all schools reported.

TABLE III (Continued)

STATE	NUMBER OF SCHOOLS WITH PUPIL-TEACHER RATIO OF:										AVERAGE NUMBER CLASSES DAILY PER TEACHER							NUMBER OF PUPILS ENROLLED FOR FIVE OR MORE UNITS					PERCENT OF TOTAL ENROLLMENT IN EACH GRADE				
											Less than 3	3-9	4-9	5-9	6-9	7 or more											
	0 to 14.0	14.1 to 16.0	16.1 to 18.0	18.1 to 20.0	20.1 to 22.0	22.1 to 24.0	24.1 to 26.0	26.1 to 28.0	28.1 to 30.0	Over 30.0							0	10	11	12	Total	9	10	11	12	Total	
1. Arizona.....	0	0	0	0	1	0	4	0	0	0	0	0	1	4	0	0	24	95	116	106	341	2.3	11.5	16.6	17.8	10.8	
2. Arkansas.....	0	0	0	0	2	0	4	5	3	3	0	0	0	1	12	4	99	122	155	173	549	5.5	5.0	7.6	9.2	6.65	
3. Colorado.....	0	0	1	0	3	3	2	2	1	0	0	0	0	3	7	2	65	729	683	451	1,928	5.3	28.2	29.8	24.6	24.1	
4. Illinois.....	1	2	3	9	15	17	14	4	3	0	3	0	24	30	9	2	142	422	968	1,058	2,590	1.1	3.2	7.7	10.0	5.2	
5. Indiana.....	1	0	0	6	13	11	9	2	0	0	0	0	0	9	20	11	159	517	600	618	1,894	2.	6.	9.	10.	7.	
6. Iowa.....	2	1	3	2	4	9	2	0	0	0	0	0	13	8	2	0	111	374	506	481	1,472	5.4	7.2	10.6	11.5	8.8	
7. Kansas.....	0	0	0	5	6	12	4	1	1	1	1	0	8	14	2	0	354	1,036	1,153	877	3,420	18.1	24.7	30.9	25.2	25.6	
8. Michigan.....	0	0	1	2	11	12	12	7	3	2	0	1	18	26	4	1	439	732	1,287	1,206	3,664	7.	8.	16.	17.	11.	
9. Minnesota.....	0	0	2	3	8	4	3	2	1	0	0	0	15	8	0	0	793	378	583	705	2,459	41.	6.	11.	15.	14.	
10. Missouri.....	0	1	0	3	6	2	4	2	3	0	0	1	9	10	1	0	101	418	570	529	1,618	3.6	10.	14.	14.	11.	
11. Montana.....	0	0	0	1	0	1	2	0	0	0	0	0	2	2	0	0	12	65	103	60	240	1.5	9.3	15.0	10.7	8.7	
12. Nebraska.....	0	0	0	2	0	1	3	2	0	0	0	0	1	3	4	0	2	93	158	264	517	.2	5.5	9.8	19.5	9.0	
13. New Mexico.....	0	0	0	0	2	1	2	1	0	0	0	0	0	2	3	1	0	43	48	53	63	207	8.7	4.6	5.6	7.9	6.3
14. North Dakota.....	0	0	0	1	0	1	1	0	0	0	0	0	0	0	3	0	0	16	118	97	231	0	1.9	16.6	14.6	10.5	
15. Ohio.....	2	1	11	14	9	28	9	6	4	0	0	2	8	29	34	11	429	1,016	1,592	1,844	4,881	3.5	6.7	11.7	10.1	8.1	
16. Oklahoma.....	0	0	0	0	3	7	2	1	0	2	0	0	7	7	0	1	9	354	340	405	1,117	.6	12.	12.	17.	11.	
17. South Dakota.....	0	0	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	5	28	51	84	0	1.9	5.4	4.4	5.4	
18. West Virginia.....	0	0	0	0	2	10	13	11	4	5	1	0	7	30	7	0	580	762	1,147	1,185	3,674	9.1	10.0	18.4	19.0	14.3	
19. Wisconsin.....	0	0	0	7	11	17	9	0	1	0	0	1	0	17	22	4	1	294	748	937	1,110	3,089	5.3	8.9	11.5	15.0	10.4
20. Wyoming.....	0	0	0	0	1	1	1	0	0	0	0	0	1	2	0	0	9	47	123	123	302	1.6	8.7	25.3	27.4	14.8	
TOTALS, 1947..	6	5	21	55	97	132	100	47	24	13	5	5	150	241	81	18	3,665	7,977	11,229	11,406	34,277	5.5	8.4	13.1	15.1	10.6	

TABLE III (Concluded)

STAFF MEMBERS			DEGREES AND PROFESSIONAL TRAINING (NEW TEACHERS)										EXPERIENCE (NEW TEACHERS)															
			Men					Women					Men					Women										
			PhD	MA	BA	No BA	Less than 15 hrs. Educ.	PhD	MA	BA	No BA	Less than 15 hrs. Educ.	Less than 1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 or more yrs.	1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 or more yrs.		
Total			0	7	11	3	2	0	3	12	0	0	6	2	0	1	1	0	11	5	0	2	0	0	0	8		
1. Arizona.....	21	15	36	0	14	42	2	2	0	5	63	7	5	18	5	4	6	3	3	19	28	3	4	2	4	6	28	
2. Arkansas.....	58	75	133	0	13	33	3	3	0	5	51	4	6	16	3	2	3	4	17	27	3	4	5	3	0	18		
3. Colorado.....	49	60	109	0	69	144	6	2	0	36	100	6	2	88	22	16	8	7	13	65	75	9	20	24	7	14	53	
4. Illinois.....	219	202	421	0	4	56	134	4	0	1	15	100	1	1	61	21	16	13	7	6	74	32	9	13	12	5	6	40
5. Indiana.....	198	117	315	4	25	75	2	8	0	9	65	2	8	23	11	5	6	7	2	48	6	7	12	7	7	7	30	
6. Iowa.....	102	76	178	0	30	78	1	1	0	13	74	7	7	14	8	11	12	13	44	24	5	10	10	7	3	35		
7. Kansas.....	110	94	204	0	46	116	4	6	0	16	166	4	12	63	11	11	16	15	10	40	64	26	17	16	6	5	52	
8. Michigan.....	166	186	352	0	30	100	2	5	0	11	84	0	4	34	5	12	17	9	5	50	16	3	14	3	7	7	45	
9. Minnesota.....	132	95	227	0	1	30	52	6	1	0	16	66	5	1	29	5	5	7	3	33	19	5	6	6	6	7	38	
10. Missouri.....	89	87	176	1	6	16	2	3	0	5	12	0	0	8	0	0	1	2	0	13	2	2	3	1	3	1	14	
11. Montana.....	24	26	50	0	5	23	0	0	0	9	30	1	0	6	4	0	3	3	2	10	8	2	2	3	6	3	16	
12. Nebraska.....	28	40	68	0	5	20	0	0	0	5	16	1	2	2	3	1	3	2	1	13	2	1	1	3	1	4	10	
13. New Mexico.....	25	22	47	0	21	8	0	0	0	1	10	1	0	0	0	2	4	0	0	3	0	2	2	2	1	0	5	
14. North Dakota.....	9	21	21	0	1	8	0	0	0	1	10	1	0	0	0	2	4	0	0	3	0	2	2	1	10	24	105	
15. Ohio.....	301	257	558	0	79	212	10	3	0	46	205	6	5	32	19	15	12	16	24	183	70	21	16	11	10	24	105	
16. Oklahoma.....	60	40	100	0	17	40	3	1	0	16	24	0	3	12	4	4	8	5	5	22	14	2	5	4	3	3	9	
17. South Dakota.....	8	4	12	0	0	7	1	1	0	0	4	0	0	2	0	1	2	1	0	2	0	0	3	0	0	1	1	
18. West Virginia.....	134	139	273	0	35	94	5	5	0	13	111	15	17	56	11	8	3	12	7	37	72	8	13	10	7	2	27	
19. Wisconsin.....	172	208	380	0	46	126	0	4	1	26	178	3	4	57	14	13	14	13	9	52	75	17	18	18	11	9	60	
20. Wyoming.....	9	10	19	0	2	7	0	0	0	0	10	0	1	3	0	0	2	2	1	1	6	0	0	0	2	2	2	
TOTALS, 1947.....	1,914	1,765	3,679	6	516	1,338	54	47	2	250	1,450	63	78	530	148	123	140	128	108	737	545	125	165	137	94	103	596	



TABLE IV

SUMMARY OF THE 1946-47 ANNUAL REPORTS OF SECONDARY SCHOOLS ENROLLING 1,000 OR MORE PUPILS

STATE	TOTAL NUMBER SCHOOLS			ENROLLMENT DATA												GRADUATES			
				In Schools Reporting on Upper					By Grades					Total Number En- rolled	Aver- age Per School	Boys	Girls	Total	
	Public	Private	Total	3 yrs.	4 yrs.	5 yrs.	6 yrs.	7	8	9	10	11	12						Spe- cial
1. Arizona.....	4	0	4	2,542	6,901	0	0	0	0	2,318	2,779	2,376	1,882	88	9,443	2360.8	739	957	1,696
2. Arkansas.....	3	0	3	3,025	0	0	1,451	317	313	260	1,297	1,273	1,011	5	4,476	1492.	397	537	934
3. Colorado.....	8	0	8	8,104	4,487	0	1,477	243	221	1,836	4,677	4,062	3,071	48	14,158	1769.7	1,466	1,777	3,246
4. Illinois.....	85	8	93	11,180	176,415	0	0	0	0	47,227	51,598	46,906	40,341	1523	187,595	2017.1	23,991	19,923	43,824
5. Indiana.....	26	0	26	3,975	36,058	3,133	0	0	308	11,270	12,106	9,856	8,751	875	43,166	1660.2	5,115	4,648	9,763
6. Iowa.....	9	0	9	8,412	0	0	3,427	589	536	644	3,951	3,405	2,708	6	11,859	1315.4	1,434	1,653	3,087
7. Kansas.....	9	0	9	7,235	4,139	0	2,092	328	305	1,217	4,345	3,792	3,399	80	13,466	1496.2	1,573	1,613	3,186
8. Michigan.....	50	2	52	46,641	43,406	2,741	7,512	1,053	1,441	12,572	32,154	28,829	23,210	1,041	100,300	1928.8	10,390	12,883	23,273
9. Minnesota.....	12	0	12	12,372	6,166	0	0	0	0	1,356	6,314	6,078	4,751	39	18,538	1544.8	2,063	2,797	4,770
10. Missouri.....	26	2	28	7,669	24,343	8,398	2,698	303	2,282	8,721	11,971	10,473	9,315	43	43,168	1539.6	4,055	5,063	9,118
11. Montana.....	4	0	4	1,131	4,140	0	0	0	0	1,262	1,479	1,335	1,101	4	5,271	1317.7	527	603	1,130
12. Nebraska.....	7	0	7	2,049	10,117	0	1,284	244	201	3,197	3,565	3,504	2,726	13	13,450	1921.4	1,258	1,418	2,676
13. New Mexico.....	1	0	1	2,367	0	0	0	0	0	0	929	865	633	0	2,367	2367.	200	287	487
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio.....	67	2	69	39,865	56,499	1,300	14,721	2,039	2,812	17,574	31,057	26,270	22,965	578	103,295	1497.	11,728	12,379	24,107
16. Oklahoma.....	7	0	7	12,418	0	0	0	0	0	0	4,721	3,845	3,454	398	12,418	1774.	1,458	1,673	3,131
17. South Dakota.....	1	0	1	0	1,828	0	0	0	0	618	416	483	305	6	1,828	1828.	133	205	338
18. West Virginia.....	10	0	10	9,896	0	0	2,294	387	347	530	4,154	3,051	3,121	150	12,190	1219.	1,446	1,712	3,158
19. Wisconsin.....	30	1	31	18,171	21,283	0	6,353	442	453	6,293	13,293	12,619	10,824	1,883	45,897	1477.6	5,537	5,900	11,437
20. Wyoming.....	2	0	2	1,001	1,069	0	0	0	0	289	651	627	487	16	2,070	1035.	229	250	479
TOTALS, 1947..	361	15	376	189,143	396,761	15,572	43,309	5,945	9,219	117,184	191,457	170,039	144,145	6,766	644,785	1714.8	73,652	76,188	149,840
1946.....	359	16	375	186,147	403,800	16,072	40,431	5,518	7,094	128,005	203,107	165,257	135,511	1,958	646,450	1723.9	57,568	78,435	136,003
1945.....	362	15	377	182,983	417,257	8,845	38,161	5,707	7,267	134,030	195,936	161,459	138,056	4,731	647,246	1718.	55,721	77,456	133,157
1944.....	355	11	366	187,760	401,755	9,188	40,493	6,116	8,326	128,942	196,345	160,797	132,641	6,029	639,196	1746.	66,441	79,792	146,413
1943.....	Totals not comparable—data from one state lacking.																		

TABLE IV (Continued)

STATE	DAYS TAUGHT IN 1946-1947					UNITS FOR GRADUATION										MINUTES IN CLASS PERIOD										
	Less than 170 170 to 174 175 to 179 180 to 184 185 or more					FOUR-YEAR SCHOOLS					THREE-YEAR SCHOOLS					NON-LABORATORY SUBJECTS					LABORATORY SUBJECTS					
						Less than 16	16	17	18	19	20 or more	Less than 12	12	13	14						15 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more
	Less than 170	170 to 174	175 to 179	180 to 184	185 or more	Less than 16	16	17	18	19	20 or more	Less than 12	12	13	14	15 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more
1. Arizona.....	0	1	3	0	0	0	0	1	2	0	0	0	1	0	0	0	0	0	0	3	1	0	0	0	1	3
2. Arkansas.....	0	0	3	0	0	0	0	1	0	0	0	0	2	0	1	0	1	0	0	2	0	0	0	0	2	1
3. Colorado.....	0	0	0	3	5	0	0	1	0	0	0	0	0	3	0	1	0	3	3	2	0	0	3	3	2	1
4. Illinois.....	5	3	14	15	56	0	40	7	38	0	0	0	8	0	0	0	58	4	6	12	13	1	0	2	14	76
5. Indiana.....	0	4	9	12	1	0	21	2	0	0	0	0	3	0	0	0	7	0	3	16	0	0	0	3	16	7
6. Iowa.....	0	0	5	2	2	0	1	1	0	0	1	0	6	0	0	0	1	1	1	0	6	0	0	1	1	7
7. Kansas.....	0	2	4	3	0	0	2	2	1	0	0	0	3	0	0	1	0	0	0	7	2	0	0	0	7	2
8. Michigan.....	1	0	8	10	33	1	27	0	0	0	0	0	20	1	0	3	17	7	9	16	3	3	0	7	15	27
9. Minnesota.....	0	0	3	9	0	0	4	0	0	0	0	0	8	0	0	0	0	0	1	10	1	0	0	1	10	1
10. Missouri.....	0	0	6	4	18	0	5	18	0	0	0	0	3	2	0	0	9	0	11	5	3	1	0	11	4	12
11. Montana.....	0	1	2	1	0	0	3	0	0	0	0	0	1	0	0	0	0	0	1	2	1	0	0	1	2	1
12. Nebraska.....	0	3	1	3	0	0	6	0	0	0	0	0	1	0	0	0	6	0	0	0	1	2	0	0	0	5
13. New Mexico.....	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio.....	0	3	11	40	15	0	17	9	3	0	0	0	38	2	0	0	32	9	10	10	8	0	0	6	29	34
16. Oklahoma.....	0	0	7	0	0	0	0	0	0	0	0	0	4	1	2	0	0	0	0	4	3	0	0	0	4	3
17. South Dakota.....	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
18. West Virginia.....	0	3	7	0	0	0	2	0	0	0	0	0	7	1	0	0	0	0	0	7	3	0	0	0	7	3
19. Wisconsin.....	0	1	6	10	14	0	14	2	1	0	0	10	0	0	4	7	8	8	8	0	5	6	7	8	5	0
20. Wyoming.....	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	2	0	0
TOTALS, 1947..	6	22	89	114	145	1	148	43	45	0	1	117	10	2	9	138	32	53	108	45	12	9	42	125	188	188

TABLE IV (Continued)

STATE		Number of Schools Maintaining	Length in Days										Minutes in Class Period										No. of Clock Hours for Each Unit									
													Non-Laboratory Subjects					Laboratory Subjects														
			Less than 40					41 to 60					61 to 80					81 to 100					101 to 120					121 or more				
			20 to 29	30 to 39	40 to 49	50 to 59	60 or more	Less than 40	41 to 60	61 to 80	81 to 100	101 to 120	121 or more	Less than 40	41 to 60	61 to 80	81 to 100	101 to 120	121 or more	Less than 100	100 to 109	110 to 119	120 to 129	130 to 139	140 or more	Less than 100	100 to 109	110 to 119	120 to 129	130 to 139	140 or more	
1. Arizona.....	2	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	1	
2. Arkansas.....	3	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
3. Colorado.....	4	0	1	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
4. Illinois.....	77	0	19	57	0	1	0	4	1	54	15	3	0	0	0	0	0	2	7	53	5	0	0	0	0	0	0	0	0	0	0	11
5. Indiana.....	23	0	4	16	0	3	0	5	2	12	1	3	0	5	2	2	1	7	10	0	0	0	0	0	0	0	0	0	0	0	3	
6. Iowa.....	6	0	4	2	0	0	0	1	0	1	1	2	0	0	0	1	0	1	3	4	0	0	0	0	0	0	0	0	0	0	1	
7. Kansas.....	4	0	1	3	0	0	0	1	0	0	1	2	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	
8. Michigan.....	39	2	18	14	1	4	0	6	0	23	9	1	0	0	0	0	8	4	7	2	0	0	0	0	0	0	0	0	0	0	3	
9. Minnesota.....	3	0	2	1	0	0	0	0	0	1	0	1	0	0	0	1	0	1	6	0	0	0	0	0	0	0	0	0	0	1	0	
10. Missouri.....	15	0	7	7	1	0	0	2	1	0	12	0	4	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	1	10	
11. Montana.....	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
12. Nebraska.....	3	0	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13. New Mexico.....	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Ohio.....	36	0	11	25	0	0	0	8	4	17	4	3	0	0	0	0	4	10	3	0	0	0	0	0	0	0	0	0	0	8	4	
16. Oklahoma.....	6	0	0	2	0	4	0	0	0	0	2	4	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	3	
17. South Dakota.....	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18. West Virginia.....	6	0	4	2	0	0	0	1	0	1	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	3	
19. Wisconsin.....	9	0	8	1	0	0	0	1	3	1	3	0	0	0	0	4	1	1	1	5	1	0	0	0	0	0	0	0	0	0	1	
20. Wyoming.....	2	0	1	1	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
TOTALS, 1947.....	241	2	87	137	2	13	1	32	17	110	57	23	4	7	9	18	46	77	40	3	1	143	12	42								

TABLE IV (Continued)

STATE	LIBRARIANS						SALARIES—ADMINISTRATORS																																
	Total No. Full- Time	Total No. Part- Time	Semester Hours of Training in Library Science						Superintendents—Public Schools														Principals—Public Schools																
			24 hrs. or more						1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2799	2750 to 2999	3000 to 3499	3500 to 3999	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	1000 to 1249	1250 to 1499	1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 2999	3000 to 3499	3500 to 3999						
			16 to 23	6 to 15	0 to 5	6 to 15	16 to 23	24 hrs. or more	0 to 5	6 to 15	16 to 23	24 hrs. or more	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2799	2750 to 2999	3000 to 3499	3500 to 3999	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	1000 to 1249	1250 to 1499	1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2749	2750 to 2999	3000 to 3499	3500 to 3999		
1. Arizona.....	8	0	6	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2. Arkansas.....	3	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3. Colorado.....	8	3	7	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4. Illinois.....	170	25	106	13	22	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Indiana.....	32	3	27	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6. Iowa.....	10	6	7	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7. Kansas.....	15	5	11	2	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8. Michigan.....	67	9	51	8	8	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9. Minnesota.....	16	5	13	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10. Missouri.....	36	0	27	5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11. Montana.....	4	1	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12. Nebraska.....	14	1	11	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13. New Mexico.....	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Ohio.....	97	10	84	4	3	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16. Oklahoma.....	8	3	4	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17. South Dakota.....	3	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18. West Virginia.....	11	3	8	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19. Wisconsin.....	39	7	24	3	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20. Wyoming.....	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS, 1947.....	543	82	392	48	71	114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



TABLE IV (Continued)

SALARIES—ADMINISTRATORS (Continued)																																
STATE	Principals—Public Schools (Continued)															Superintendents—Private Schools														Private School Principals		
	4000	4500	5000	5500	6000	6500	7000	7500	Less than 999	1000	1250	1500	1750	2000	2250	2500	2750	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	Less than 999	1000	1250		
	to 4499	to 4999	to 5499	to 5999	to 6499	to 6999	to 7499	or more		to 1249	to 1499	to 1799	to 1999	to 2249	to 2499	to 2799	to 2999	to 3499	to 3999	to 4499	to 4999	to 5499	to 5999	to 6499	to 6999	to 7499	or more		to 1249	to 1499		
1. Arizona.....	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2. Arkansas.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3. Colorado.....	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4. Illinois.....	1	7	7	15	29	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Indiana.....	2	5	7	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Iowa.....	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Kansas.....	4	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. Michigan.....	2	10	9	6	3	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
9. Minnesota.....	1	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. Missouri.....	3	4	6	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
11. Montana.....	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12. Nebraska.....	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13. New Mexico....	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14. North Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio.....	26	9	4	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
16. Oklahoma.....	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17. South Dakota...	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18. West Virginia...	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19. Wisconsin.....	2	12	10	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
20. Wyoming.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS, 1947...	52	66	64	41	55	2	4	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0

TABLE IV (Continued)

SALARIES—ADMINISTRATORS (Continued)															TOTAL NUMBER OF ADMINISTRATORS				NUMBER OF YEARS ADMINISTRATORS HAVE HELD PRESENT POSITION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
STATE	Principals—Private Schools (Continued)															Total Public Schools		Total Private Schools		Less than 1 yr.	1	2	3	4	5	6 to 10	11 to 15	16 to 20	21 or more																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	1500 to 1749	1750 to 1999	2000 to 2249	2250 to 2499	2500 to 2799	2799 to 3099	3099 to 3499	3499 to 3999	3999 to 4499	4499 to 4999	4999 to 5499	5499 to 5999	5999 to 6499	6499 to 6999	6999 to 7499	7500 or more	Supt.	Prin.	Supt.											Prin.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19											20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE IV (Continued)

SALARIES—FULL-TIME TEACHERS																											
STATE		Public School—Men													Public School—Women												
		Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	148	0	0	0	0	0	0	3	10	17	13	33	86	162
2. Arkansas.....	0	0	2	2	0	6	4	4	3	2	14	40	83	28	2	0	4	16	12	28	10	26	1	0	0	0	99
3. Colorado.....	0	0	0	0	3	15	18	17	20	30	22	78	203	4	0	1	3	1	5	49	33	38	7	20	8	103	268
4. Illinois.....	0	0	0	1	3	16	43	52	109	154	172	2,016	2,566	2,566	0	0	0	9	14	80	159	190	258	217	256	2,957	4,140
5. Indiana.....	0	0	0	0	0	2	19	40	57	81	115	466	780	780	1	0	0	2	2	16	61	48	63	89	111	504	897
6. Iowa.....	0	0	0	0	0	2	5	12	29	38	50	29	165	165	0	0	0	0	0	43	24	27	45	59	54	3	255
7. Kansas.....	0	0	0	0	0	0	0	5	22	48	32	87	194	194	0	0	0	1	2	19	42	59	49	7	17	91	287
8. Michigan.....	0	0	0	0	0	1	2	29	56	60	107	215	709	2,179	0	4	0	1	6	60	110	108	121	202	234	727	1,573
9. Minnesota.....	0	0	0	0	2	6	27	14	13	38	16	107	223	223	0	0	0	3	11	20	15	14	13	69	29	192	366
10. Missouri.....	9	1	0	0	2	8	17	31	37	45	48	34	340	572	0	0	0	17	40	72	69	68	65	70	31	513	945
11. Montana.....	0	0	0	0	0	0	4	5	5	21	19	11	66	66	0	0	0	0	1	7	17	17	31	26	22	0	121
12. Nebraska.....	0	0	0	3	1	5	7	10	14	32	44	23	139	139	0	0	1	11	6	18	26	10	22	40	122	73	329
13. New Mexico.....	0	0	1	0	0	0	1	4	5	4	14	29	0	29	0	0	0	0	0	7	4	8	5	7	18	49	0
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15. Ohio.....	0	0	1	5	8	32	64	106	184	241	207	871	1,719	1,719	0	0	8	32	62	82	120	149	167	213	269	1,052	2,154
16. Oklahoma.....	2	0	0	0	6	5	15	21	18	12	23	16	118	118	0	0	3	6	21	19	24	30	36	94	5	4	242
17. South Dakota.....	0	0	0	0	0	1	7	3	3	7	5	3	29	29	0	0	2	0	8	7	5	13	7	0	0	0	42
18. West Virginia.....	0	0	1	5	27	23	21	18	8	26	5	13	147	147	0	0	5	55	54	56	80	34	8	3	0	0	295
19. Wisconsin.....	0	3	1	7	9	17	48	55	73	127	136	293	769	769	0	4	2	9	35	58	73	73	93	179	123	187	836
20. Wyoming.....	0	0	0	0	0	0	2	2	2	9	6	6	27	27	0	0	0	0	1	1	5	11	6	9	11	2	46
TOTALS, 1947..	11	4	6	25	68	150	345	460	677	1,040	1,146	5,169	9,101	9,101	3	9	28	163	280	635	883	929	1,017	1,315	1,332	6,512	13,106

TABLE IV (Continued)

STATE		SALARIES—FULL-TIME TEACHERS (Continued)																								TOTAL FULL-TIME TEACHERS						
		Private Schools—Men												Private Schools—Women																		
		Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999			3000 or more	Total	Public	Private	
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	310	0	0		
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	127	0	0		
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	471	0	0		
4. Illinois.....	0	1	0	0	2	7	12	5	5	2	7	3	44	0	0	0	4	6	2	2	0	0	0	0	0	0	14	6,706	58	0		
5. Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,677	0	0		
6. Iowa.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420	0	0		
7. Kansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	481	0	0		
8. Michigan.....	0	0	0	0	0	0	0	0	0	0	0	0	1*	0	0	0	1	0	0	0	0	0	0	0	0	0	1*	2,732	2*	0		
9. Minnesota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	589	0	0		
10. Missouri.....	54	0	0	0	0	0	0	0	0	0	1	1	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,517	58	0		
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187	0	0		
12. Nebraska.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	468	0	0		
13. New Mexico...	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	0	0		
14. North Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Ohio.....	0	0	0	0	0	0	0	3	1	5	1	1	11*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,873	11*	0	0	
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	360	0	0	0	
17. South Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	0	0	0	
18. West Virginia..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	442	0	0	0	
19. Wisconsin.....	3	1	0	0	0	0	1	1	0	0	0	0	6	36	0	2	1	1	0	0	0	0	0	0	0	40	1,605	46	0	0	0	
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	0	
TOTALS, 1947...	57	2	0	0	2	9	16	7	10	4	8	5	120*	36	0	2	5	8	2	2	0	0	0	0	0	55*	22,207	175*	0	0	0	0

\* Not all schools reported.



TABLE IV (Continued)

STATE	NUMBER OF SCHOOLS WITH PUPIL TEACHER RATIO OF:										AVERAGE NUMBER CLASSES DAILY PER TEACHER					NUMBER OF PUPILS ENROLLED FOR FIVE OR MORE UNITS					PERCENT OF TOTAL ENROLLMENT IN EACH GRADE															
	14.0 to 16.0		16.0 to 18.0		18.0 to 20.0		20.0 to 22.0		22.0 to 24.0		24.0 to 26.0		26.0 to 28.0		28.0 to 30.0		Over 30		Less than 3	3 to 3.9	3.9 to 4.9	4.9 to 5.9	5.9 to 6.9	6.9 or more	9	10	11	12	Total	9	10	11	12	Total		
	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	132	225	262	647	1.2	4.7	9.5	13.9	6.9		
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	533	59	58	43	100	0	4.6	4.0	4.2	4.2		
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	333	2,748	2,238	1,537	7,056	28.4	58.7	55.1	50.0	61.5			
4. Illinois.....	0	1	2	6	19	23	32	6	3	1	5	2	21	59	6	0	369	702	1,288	2,380	4,739	.8	1.4	2.7	5.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
5. Indiana.....	0	0	1	2	5	8	7	3	0	0	0	0	11	15	0	0	727	1,709	1,331	1,219	4,986	6.	14.	13.	14.	12.	12.	12.	12.	12.	12.	12.	12.	12.	12.	
6. Iowa.....	0	0	1	0	0	3	3	2	0	0	0	0	1	8	0	0	7	246	299	253	805	1.1	6.2	8.8	9.3	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	
7. Kansas.....	0	0	0	0	0	0	4	4	0	1	0	0	2	7	0	0	246	1,013	923	1,014	3,106	20.2	23.3	24.3	20.8	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9	
8. Michigan.....	0	0	0	0	1	2	8	14	11	14	2	1	0	15	31	4	756	1,866	3,637	3,126	9,385	6.	6.	13.	14.	9.	9.	9.	9.	9.	9.	9.	9.	9.	9.	
9. Minnesota.....	0	0	0	0	0	0	3	0	2	5	2	0	0	7	5	0	24	297	505	770	1,656	1.	3.	9.	16.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.
10. Missouri.....	0	0	0	0	0	0	2	9	9	5	1	2	0	11	17	0	314	733	922	1,124	3,093	3.6	6.1	8.8	12.1	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	
11. Montana.....	0	0	0	0	0	0	0	0	3	1	0	0	0	2	2	0	184	170	222	271	847	14.6	11.5	16.6	22.7	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	
12. Nebraska.....	0	0	0	0	0	1	1	2	3	0	0	0	0	2	5	0	53	212	410	370	1,045	1.6	5.9	11.8	13.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	
13. New Mexico...	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	20	121	118	259	0	2.1	15.0	18.6	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
14. North Dakota..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Ohio.....	0	0	1	5	2	28	17	11	5	0	0	0	0	18	37	12	839	1,957	2,966	3,273	9,035	4.7	6.3	11.3	14.6	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
16. Oklahoma.....	0	0	0	0	0	0	0	1	2	1	0	3	0	2	5	0	0	236	541	500	1,277	0	5.	14.	14.0	10.	10.	10.	10.	10.	10.	10.	10.	10.	10.	10.
17. South Dakota...	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	7	13	69	27	116	1.	3.	14.	9.	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	
18. West Virginia..	0	0	0	0	0	0	1	4	0	2	1	2	0	5	5	0	7	404	668	640	1,659	1.3	9.7	17.3	20.5	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	
19. Wisconsin.....	0	0	0	0	0	0	3	6	16	5	1	0	0	15	16	0	152	568	845	1,156	2,721	2.4	4.3	6.7	10.7	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	
20. Wyoming.....	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1	0	1	26	86	116	229	.4	3.9	13.7	23.8	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	
TOTALS, 1947...	0	1	5	14	38	99	118	60	30	11	6	2	116	222	27	3	4,247	13,111	17,354	18,109	53,911	3.6	6.8	10.2	12.6	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4

TABLE IV (Continued)

STATE	NEW STAFF MEMBERS		DEGREES AND PROFESSIONAL TRAINING (NEW TEACHERS)										EXPERIENCE (NEW TEACHERS)														
			Men					Women					Men					Women									
			PhD	MA	BA	No BA	Less than 15 hrs. Educ.	PhD	MA	BA	No BA	Less than 15 hrs. Educ.	Less than 1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 or more yrs.	Less than 1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 or more yrs.	
1. Arizona.....	32	31	63	0	17	14	1	2	0	21	10	0	1	4	1	0	4	1	21	10	2	0	4	2	2	11	
2. Arkansas.....	17	25	42	0	2	12	3	0	0	7	17	1	6	1	3	1	2	0	4	8	0	4	1	0	3	9	
3. Colorado.....	42	33	75	0	12	26	4	4	0	8	25	0	3	14	2	2	7	3	12	10	4	4	3	2	0	10	
4. Illinois.....	298	286	584	0	105	185	8	12	0	74	205	7	10	107	24	26	25	17	15	84	101	30	15	16	6	102	
5. Indiana.....	176	123	299	3	66	106	1	0	0	21	102	0	0	47	5	21	10	10	8	75	33	12	14	7	7	47	
6. Iowa.....	33	29	62	0	9	24	0	1	0	4	23	2	1	7	2	4	4	5	1	10	4	5	2	3	1	12	
7. Kansas.....	42	39	81	2	12	27	1	1	0	8	31	0	1	5	2	4	4	2	1	2	26	5	1	3	2	21	
8. Michigan.....	215	295	510	4	86	119	6	7	0	75	215	5	4	68	29	18	14	10	7	69	100	16	27	23	14	101	
9. Minnesota.....	62	69	131	0	17	37	8	2	0	10	58	1	0	4	2	6	1	1	6	42	6	4	10	6	3	37	
10. Missouri.....	127	90	127	1	64	59	3	4	0	35	51	4	1	22	8	15	9	8	4	61	28	6	8	7	4	7	
11. Montana.....	18	21	39	0	4	13	1	0	0	3	17	1	2	3	1	1	1	1	1	10	2	2	4	2	2	8	
12. Nebraska.....	27	31	58	0	7	17	3	2	0	8	22	1	0	8	4	1	3	0	3	8	7	2	3	5	2	11	
13. New Mexico.....	10	9	19	0	4	4	4	2	1	0	2	7	0	2	0	0	1	0	1	6	0	0	2	1	0	5	
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Ohio.....	306	226	532	1	103	182	20	15	0	53	159	14	8	79	13	24	19	11	24	136	82	15	20	11	7	13	
16. Oklahoma.....	33	37	70	0	14	19	0	3	0	9	28	0	0	4	2	1	1	0	5	20	7	3	5	1	3	15	
17. South Dakota.....	1	4	5	0	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
18. West Virginia.....	42	55	97	0	10	29	3	4	0	11	37	7	5	18	0	2	1	1	6	14	21	6	4	2	3	16	
19. Wisconsin.....	194	153	347	2	63	125	4	2	1	23	128	1	0	59	21	18	14	14	10	58	41	15	14	11	8	61	
20. Wyoming.....	6	11	17	0	0	5	1	0	0	2	7	2	1	2	2	0	0	1	1	0	4	1	1	0	0	5	
TOTALS, 1947..	1,681	1,567	3,248	13	596	1,003	69	60	1	374	1,146	46	37	459	119	146	117	87	97	656	469	124	140	107	78	67	582

TABLE V

SUMMARY OF THE 1946-47 ANNUAL REPORTS OF ALL SECONDARY SCHOOLS ACCREDITED BY THE NORTH CENTRAL ASSOCIATION

STATE	TOTAL NUMBER SCHOOLS		ENROLLMENT DATA										GRADUATES 1946						
			In Schools Reporting on Upper						By Grades				Total Number En- rolled	Aver- age Per School	Boys	Girls	Total		
	3 yrs.	4 yrs.	5 yrs.	6 yrs.	7	8	9	10	11	12	Special								
	Pub- lic	Pri- vate	total																
1. Arizona.....	46	0	46	2,977	16,594	151	1,452	242	275	5,781	5,871	4,851	4,039	128	21,174	460.3	1,410	1,026	3,336
2. Arkansas.....	72	4	76	7,488	5,639	803	14,848	2,986	2,866	4,582	7,060	6,008	5,333	19	28,068	381.1	1,915	2,790	4,705
3. Colorado.....	94	11	105	12,082	22,469	443	5,900	1,075	1,050	7,009	10,635	8,781	188	41,884	308.9	3,908	4,671	8,579	
4. Illinois.....	376	95	471	13,606	280,274	227	499	74	72	76,844	79,414	73,480	62,969	1,843	294,666	625.7	33,295	31,740	65,035
5. Indiana.....	153	8	161	9,020	67,071	4,611	17,556	2,727	3,172	23,938	26,202	22,319	19,704	1,096	99,158	615.9	10,631	10,374	21,005
6. Iowa.....	157	15	172	21,056	33,399	0	7,779	1,245	1,100	10,278	18,043	16,536	14,548	394	62,234	361.8	6,431	7,588	14,019
7. Kansas.....	199	14	213	16,418	32,338	0	12,639	2,025	1,998	10,733	17,133	15,397	13,918	191	61,395	288.2	5,732	6,925	12,657
8. Michigan.....	216	26	242	62,350	76,765	6,184	30,448	4,414	5,329	27,574	31,847	46,428	38,735	1,420	175,747	726.2	16,591	20,852	37,443
9. Minnesota.....	94	23	117	38,208	17,773	0	966	120	120	4,474	18,948	17,490	15,592	157	56,910	486.4	6,117	8,201	14,318
10. Missouri.....	130	50	180	14,881	55,540	10,821	10,045	1,387	3,749	19,046	24,905	21,873	20,151	176	91,287	507.1	8,214	10,062	18,276
11. Montana.....	31	2	33	1,131	10,795	0	274	51	47	3,117	3,263	2,087	2,706	29	12,200	369.7	1,142	1,391	2,533
12. Nebraska.....	141	10	151	6,022	34,217	0	4,103	611	575	10,120	11,731	11,333	9,853	119	44,342	293.6	3,856	4,172	8,568
13. New Mexico.....	39	1	40	5,863	4,704	395	4,274	818	840	2,599	4,319	3,074	3,045	31	15,326	383.2	1,136	1,298	2,434
14. North Dakota.....	59	4	63	3,286	8,713	223	1,110	141	200	2,589	3,736	3,460	3,183	23	13,332	211.6	1,084	1,732	2,816
15. Ohio.....	378	35	413	44,480	102,661	4,255	80,482	13,068	13,749	43,581	60,503	53,186	47,010	781	231,878	561.4	21,893	25,278	47,171
16. Oklahoma.....	119	3	122	25,784	18,909	0	306	47	57	5,627	14,337	12,909	11,422	600	44,099	368.8	4,399	5,412	9,811
17. South Dakota.....	79	2	81	2,846	13,795	0	314	42	38	4,179	4,626	4,388	3,626	56	16,955	209.3	1,533	2,217	3,660
18. West Virginia.....	154	2	156	15,863	18,796	0	40,581	7,270	6,684	13,706	18,391	15,326	13,428	435	75,240	482.3	4,347	5,562	9,909
19. Wisconsin.....	123	28	151	29,189	53,571	830	14,746	1,285	1,518	16,910	27,280	26,143	23,128	2,072	98,336	651.2	10,310	12,112	22,422
20. Wyoming.....	31	1	32	1,001	6,445	0	2,613	486	425	2,239	2,458	2,363	2,050	38	10,059	314.3	819	1,041	1,860
TOTALS, 1947*	2,601	334	3,035	335,541	880,518	29,033	251,028	40,108	43,993	295,813	412,313	370,876	323,221	9,796	1,496,120	494.6	144,763	165,794	310,557
1946*	2,701	324	3,025	326,974	877,539	30,688	255,498	40,256	43,845	313,108	428,502	359,392	300,988	4,608	1,490,609	492.8	123,300	171,277	294,577
1945*	2,603	328	3,031	324,582	879,453	29,002	242,385	39,300	41,518	316,981	411,676	348,374	301,997	6,756	1,466,512	493.	123,339	171,972	294,411
1944*	3,010	310	3,320	310,014	853,069	19,593	272,974	44,529	46,756	311,654	409,467	348,770	296,816	8,278	1,466,270	587.	144,811	175,536	320,347
1943*	Totals not comparable—data from one state lacking.																		

\* The graduates (last column) in each of these entries are for the preceding year.

TABLE V (Continued)

STATE	DAYS TAUGHT IN 1946-47					UNITS FOR GRADUATION										MINUTES IN CLASS PERIOD										
	Less than 170	170 to 174	176 to 179	180 to 184	185 or more	FOUR-YEAR SCHOOLS					THREE-YEAR SCHOOLS					NON-LABORATORY SUBJECTS					LABORATORY SUBJECTS					
						Less than 16	16	17	18	19	20 or more	Less than 12	12	13	14	15 or more	40 to 44	45 to 49	50 to 54	55 or more	40 to 44	45 to 49	50 to 54	55 to 59	60 or more	
1. Arizona.....	2	24	18	2	0	0	32	7	5	0	0	0	2	0	0	0	13	5	0	26	2	0	0	0	26	20
2. Arkansas.....	0	24	49	3	0	0	63	0	0	0	0	0	12	0	0	1	21	25	11	17	2	1	1	6	16	55
3. Colorado.....	2	36	32	26	9	0	90	2	0	0	1	0	6	5	0	1	30	23	18	31	3	7	14	38	46	
4. Illinois.....	9	31	174	128	129	1	394	20	44	0	0	0	10	1	0	1	306	31	21	56	57	8	3	5	62	393
5. Indiana.....	2	36	86	22	15	0	139	9	0	0	0	0	13	0	0	0	29	9	29	87	7	1	4	25	95	36
6. Iowa.....	0	56	97	13	6	1	114	1	0	0	23	0	30	0	0	3	39	24	15	58	36	2	2	12	65	91
7. Kansas.....	0	31	134	47	1	0	177	9	3	0	0	0	16	5	1	2	49	13	16	66	69	0	0	6	68	139
8. Michigan.....	4	12	46	99	81	2	176	8	1	0	0	0	46	1	0	8	72	37	32	89	12	6	5	20	104	107
9. Minnesota.....	8	64	27	18	0	0	30	1	0	0	0	0	86	0	0	0	8	8	10	75	16	1	1	7	84	24
10. Missouri.....	0	20	100	35	25	0	11	149	1	0	0	0	4	14	0	1	72	16	26	56	10	3	2	20	69	86
11. Montana.....	0	13	15	5	0	0	31	1	0	0	0	0	1	0	0	0	4	8	1	15	5	0	0	1	15	17
12. Nebraska.....	2	30	83	36	0	0	98	39	0	0	0	0	14	0	0	0	64	21	12	42	12	4	1	7	58	81
13. New Mexico.....	0	12	17	11	0	0	29	2	0	0	0	0	9	0	0	0	10	5	2	20	3	0	1	1	22	16
14. New Mexico.....	0	19	37	7	0	0	47	7	1	0	0	0	6	1	0	1	41	10	2	7	3	0	2	2	12	47
15. Ohio.....	23	82	185	100	23	0	284	53	13	0	0	0	60	3	0	0	253	59	18	65	18	0	0	9	111	293
16. Oklahoma.....	0	5	114	3	0	0	66	9	0	0	0	0	44	1	2	0	4	4	9	77	28	0	0	6	75	41
17. South Dakota.....	0	26	44	10	1	0	71	4	0	0	0	0	5	1	0	0	30	18	9	18	6	2	3	2	34	40
18. West Virginia.....	1	49	100	6	0	0	122	15	1	0	0	0	14	4	0	0	1	3	4	120	28	0	0	2	115	39
19. Wisconsin.....	0	25	57	38	31	1	113	8	1	0	0	0	21	2	0	5	33	36	44	33	5	13	18	43	37	39*
20. Wyoming.....	0	11	19	2	0	0	31	0	0	0	0	0	1	0	0	0	5	5	2	18	2	0	0	1	22	9
TOTALS, 1947..	53	606	1,434	611	321	5	2,118	344	70	0	24	0	400	38	3	23	1,084	360	281	976	324	41	50	189	1,128	1,616
1946..	117	596	1,290	793	226*	1	2,212	274	69	3	1	1	380	46	4	28*	1,092	336	293	960	344	93	54	221	1,058	1,597
1945..	54	443	1,321	921	280	6	2,244	244	68	1	4	0	394	35	4	16	1,045	344	299	925	408	57	51	223	964	1,716
1944..	53	476	1,291	896	287	11	2,144	248	55	0	6	2	381	35	5	41	1,073	352	302	885	398	88	65	248	960	1,649
1943..	Totals not comparable—data from one state lacking.																									

\* Not all schools reported.



TABLE V (Continued)

TABLE V (Continued)

[illegible]

• Data on librarians not available.

TABLE V (Continued)

SALARIES—ADMINISTRATORS (Continued)																																	
STATE	Principals—Public Schools (Continued)															Superintendents—Private Schools														Private School Principals			
	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499	1500 to 1799	1800 to 1999	2000 to 2499	2500 to 2999	3000 to 3499	3500 to 3999	4000 to 4499	4500 to 4999	5000 to 5499	5500 to 5999	6000 to 6499	6500 to 6999	7000 to 7499	7500 or more	Less than 999	1000 to 1249	1250 to 1499					
1. Arizona.....	8	4	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
2. Arkansas.....	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0				
3. Colorado.....	2	0	4	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4. Illinois.....	44	28	24	18	32	4	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0				
5. Indiana.....	16	14	16	11	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3	0	0	0				
6. Iowa.....	12	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	13	1	0	0				
7. Kansas.....	17	8	3	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	11	0	0	0				
8. Michigan.....	19	17	15	7	3	0	0	17	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	19	0	0	0				
9. Minnesota.....	4	6	5	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0				
10. Missouri.....	8	6	8	3	8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0				
11. Montana.....	4	2	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
12. Nebraska.....	6	4	3	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	6	0	0	0				
13. New Mexico...	3	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
14. North Dakota..	1	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0				
15. Ohio.....	30	37	15	4	5	14	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	25	0	0	0				
16. Oklahoma.....	6	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0				
17. South Dakota..	1	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
18. West Virginia..	11	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0				
19. Wisconsin.....	11	19	13	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	18	1	1	1				
20. Wyoming.....	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
TOTALS, 1947..	213	169	123	49	53	19	4	18	7	0	0	1	0	1	2	1	4	2	3	1	1	0	4	0	2	8	237	2	2	1			
1946..	181	134	77	53	20	19	17	3	13	0	1	0	0	0	1	0	4	1	0	0	3	0	3	2	0	4	224	0	0	1			
1945..	148	124	73	48	16	14	16	2	14	0	0	0	0	1	2	0	3	2	2	0	2	0	1	0	0	2	228	0	2	2			
1944..	149	86	62	46	17	24	3	2	0	0	0	0	0	0	1	2	1	3	1	1	1	0	2	0	1	32	1	1	1	1			
1943..	Totals not comparable—data from one state lacking.																																

TABLE V (Continued)

STATE		SALARIES—ADMINISTRATORS (Continued)																	TOTAL NUMBER OF ADMINISTRATORS				NUMBER OF YEARS ADMINISTRATORS HAVE HELD PRESENT POSITION									
		Principals—Private Schools (Continued)																	Total Public Schools		Total Private Schools		Less than 1 yr.	1	2	3	4	5	6 to 10	11 to 15	16 to 20	21 or more
																			Supt.	Prin.	Supt.	Prin.										
1. Arizona.....	1,500 to 1749	1750 to 2000	2000 to 2250	2250 to 2499	2499 to 2700	2700 to 2999	2999 to 3250	3250 to 3500	3500 to 4000	4000 to 4500	4500 to 5000	5000 to 5500	5500 to 6000	6000 to 6500	6500 to 7000	7000 to 7500	7500 or more	18	28	0	0	3	3	7	4	4	7	8	1	1		
2. Arkansas.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	19	1	3	6	7	6	0	12	13	7	7	5	6	
3. Colorado.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	34	2	9	20	13	13	8	13	5	10	6	3	3	
4. Illinois.....	0	0	0	0	1	3	0	5	1	3	0	4	1	0	0	1	0	66	310	4	91	12	53	45	49	47	40	92	63	32	38	
5. Indiana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	24	129	2	6	17	11	15	10	12	8	29	18	24	17	
6. Iowa.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	65	1	14	25	18	28	13	14	10	20	17	15	12	
7. Kansas.....	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	85	114	2	12	12	32	37	27	23	9	28	16	14	15	
8. Michigan.....	0	0	0	0	0	1	1	1	3	0	0	0	0	0	0	0	0	89	127	1	25	27	17	14	24	24	12	46	24	25	20	
9. Minnesota.....	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	2	35	59	2	21	8	19	20	12	14	7	18	5	6	8	
10. Missouri.....	1	0	0	0	1	0	0	3	3	2	1	1	0	0	0	3	0	49	81	1	49	24	9	27	26	17	9	36	8	14	10	
11. Montana.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	13	1	1	2	7	8	5	0	1	3	1	5	1	
12. Nebraska.....	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	110	31	3	7	0	39	32	27	13	11	10	6	7	6	
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	25	0	1	2	9	4	3	2	4	5	6	2	3	
14. North Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	8	2	2	14	9	2	8	4	4	13	3	4	2	
15. Ohio.....	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	106	272	8	27	44	42	39	41	24	22	71	45	41	44	
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	54	65	0	3	20	12	14	11	11	20	10	10	3	3	
17. South Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	11	1	1	6	13	14	13	5	7	6	2	8	7	
18. West Virginia.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154	2	0	18	11	8	6	6	13	45	24	16	9	9	
19. Wisconsin.....	0	0	0	0	0	0	1	0	2	0	0	0	1	0	0	0	0	41	82	4	24	27	15	16	8	9	9	16	15	13	23	
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	18	0	1	1	3	11	5	4	0	6	2	0	0	
TOTALS, 1947..	1	0	0	2	6	3	8	10	6	4	6	3	1	1	1	5	1,046	1,645	37	297	300	341	357	309	246	198	496	285	254	239		
1946..	2	2	3	1	5	2	8	12	10	3	2	0	2	1	2	6	1,086*	1,613*	33*	286	0	0	406	317	241	183	497	275	260	237*		
1945..	2	3	2	4	3	1	7	9	6	3	1	2	3	1	3	4	1,044	1,663	29	284	0	0	0	0	0	0	0	0	0	0	0	
1944..	3	4	4	3	6	5	8	5	8	4	2	1	4	1	3	3	1,078	1,597	15	98	0	0	0	0	0	0	0	0	0	0	0	
1943..	Totals not comparable—data from one state lacking.																															

\* Not all schools reported.



TABLE V (Continued)

## SALARIES—FULL-TIME TEACHERS

STATE	Public Schools—Men													Public Schools—Women												
	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 to more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 to more	Total
1. Arizona.....	0	0	0	0	0	1	5	30	62	67	88	128	381	1	0	0	1	0	8	29	54	77	63	66	93	302
2. Arkansas.....	0	0	10	23	12	37	24	21	59	39	14	94	313	6	7	93	243	131	104	43	39	18	1	5	0	600
3. Colorado.....	0	0	1	1	19	64	94	100	127	63	46	98	613	1	1	1	13	98	246	165	96	32	30	9	120	818
4. Illinois.....	0	0	0	1	1	10	36	151	212	405	442	2,477	4,165	0	0	0	1	26	62	305	740	826	711	397	349	3,026
5. Indiana.....	0	0	0	0	2	5	33	97	187	240	235	224	657	1	0	1	2	19	127	279	290	225	206	164	639	1,953
6. Iowa.....	0	0	0	3	3	13	51	100	162	218	193	201	944	2	2	3	7	26	384	425	228	134	130	87	8	1,436
7. Kansas.....	0	0	0	0	1	2	10	55	108	211	271	151	282	5	2	7	10	88	330	412	329	116	31	26	100	1,456
8. Michigan.....	0	0	0	0	5	20	104	189	279	335	368	946	2,246	1	6	4	10	45	267	457	359	260	273	282	771	2,735
9. Minnesota.....	0	0	0	2	0	3	11	57	88	110	185	109	739	0	0	1	4	14	148	287	169	87	153	50	212	1,125
10. Missouri.....	12	1	1	10	53	64	95	97	123	116	81	425	1,078	3	7	42	193	273	244	157	113	96	82	43	549	1,802
11. Montana.....	0	0	0	0	0	3	11	30	39	54	37	29	203	1	0	0	0	3	27	71	67	51	34	26	0	280
12. Nebraska.....	0	0	1	3	1	12	31	75	114	110	126	135	608	0	3	20	31	31	169	429	137	49	51	124	78	1,122
13. New Mexico.....	0	0	0	0	0	3	13	20	36	52	45	85	255	1	0	1	1	1	16	58	74	85	64	27	31	358
14. North Dakota.....	0	0	0	0	0	8	15	27	49	59	16	39	213	0	0	0	2	20	72	100	59	17	0	1	0	271
15. Ohio.....	0	0	0	2	10	37	209	350	525	509	560	394	1,195	0	1	18	87	393	662	675	493	392	304	332	1,209	4,566
16. Oklahoma.....	2	0	0	3	66	84	78	78	76	50	44	103	584	0	0	23	47	252	226	166	74	60	118	55	7	988
17. South Dakota.....	0	0	0	0	1	5	20	35	84	65	48	28	295	0	0	2	3	21	90	109	72	27	4	0	1	389
18. West Virginia.....	0	3	19	96	243	207	136	121	55	56	23	24	983	1	13	107	389	469	372	232	127	31	8	4	3	1,756
19. Wisconsin.....	0	3	1	7	11	27	99	131	222	292	282	452	1,517	0	5	4	9	63	272	315	231	186	233	154	225	1,697
20. Wyoming.....	0	0	0	0	0	2	17	14	26	40	33	28	169	1	0	0	1	1	8	54	66	50	22	17	3	229
TOTALS, 1947...	14	7	38	160	471	849	1,512	2,178	3,078	3,318	2,753	7,586	21,958	24	47	334	1,079	2,009	4,077	5,263	3,903	2,710	2,204	1,781	7,075	39,506
1946.....	115	20	66	162	444	968	1,723	2,121	3,066	2,764	1,934	5,234	18,617	211	158	753	1,813	3,712	6,439	5,022	2,908	2,242	2,100	1,232	5,908	32,588
1945.....	105	19	128	386	863	1,664	2,309	2,462	2,610	2,288	1,348	4,045	18,167	238	385	1,697	3,555	5,799	5,443	3,133	1,133	1,649	1,777	1,175	5,302	32,886
1944.....	107	39	244	725	1,542	2,693	2,844	2,387	2,162	1,657	1,104	3,483	18,897	483	629	2,045	6,086	5,677	3,718	2,457	2,015	1,251	1,283	1,103	4,862	32,659
1943.....	Totals not comparable—data from one state lacking.																									

TABLE V (Continued)

SALARIES—FULL-TIME TEACHERS (Continued)

STATE	Private Schools—Men														Private Schools—Women														TOTAL FULL-TIME TEACHERS	
	Private Schools—Men														Private Schools—Women														Public	Private
	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total	Less than 999	1000 to 1199	1200 to 1399	1400 to 1599	1600 to 1799	1800 to 1999	2000 to 2199	2200 to 2399	2400 to 2599	2600 to 2799	2800 to 2999	3000 or more	Total				
1. Arizona.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	773	0	
2. Arkansas.....	0	0	0	1	0	1	0	2	0	0	0	0	4	22	0	2	0	0	0	0	0	0	0	0	0	0	25	1,003	29	
3. Colorado.....	18	1	0	1	1	2	0	1	0	1	0	0	24	77	1	0	4	0	0	0	0	0	0	0	0	0	82	1,431	106	
4. Illinois.....	0	1	0	2	3	19	41	39	28	25	20	49	236	7	2	7	29	38	37	32	29	9	1	0	0	191	10,608	427		
5. Indiana.....	10	0	1	0	0	6	6	7	8	5	10	26	79	3	0	0	0	0	1	2	0	0	0	0	0	6	3,633	85		
6. Iowa.....	32	9	7	0	0	0	4	1	4	0	1	0	58	34	3	0	0	4	1	0	1	0	0	0	0	5	48	2,380	106	
7. Kansas.....	13	3	0	1	0	1	0	2	3	1	0	1	25	102	6	0	4	1	1	0	0	1	0	0	0	0	115	2,547	140	
8. Michigan.....	0	0	0	0	1	1	3	4	10	22	8	11	60	29	1	2	1	8	6	1	6	3	3	3	5	15	80*	4,081	140*	
9. Minnesota.....	0	0	0	1	2	1	6	0	20	15	1	4	50	4	0	4	12	9	3	4	9	3	5	4	3	60	1,864	110		
10. Missouri.....	142	1	2	10	0	11	11	28	15	9	9	35	273	218	5	10	8	5	12	8	9	5	4	8	6	298	2,880	571		
11. Montana.....	1	0	0	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	9	483	10		
12. Nebraska.....	20	0	1	0	0	0	1	1	2	0	0	0	25	37	0	4	0	0	3	3	1	0	0	0	0	0	48	1,730	73	
13. New Mexico.....	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	613	5		
14. North Dakota.....	0	0	1	0	0	0	1	0	2	0	0	0	4	20	0	3	1	0	0	0	0	0	0	0	0	24	484	28		
15. Ohio.....	0	0	3	1	0	5	3	11	9	11	20	60	123	3	2	6	21	3	8	7	2	8	3	6	5	74	8,447	197*		
16. Oklahoma.....	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	4	0	1	1	1	0	0	0	11	1,572	11		
17. South Dakota.....	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	4	0	0	0	0	0	0	0	0	0	17	684	17		
18. West Virginia.....	0	0	0	0	0	0	1	9	6	5	2	3	26	0	0	1	0	0	0	0	0	0	0	0	0	1	2,739	27		
19. Wisconsin.....	81	4	0	0	0	2	3	10	9	12	19	34	184	239	2	3	7	4	8	9	5	2	10	4	7	300	3,214	484		
20. Wyoming.....	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7	308	7		
TOTALS, 1947.....	317	19	15	17	9	50	87	113	120	112	90	223	1,172	831	22	41	94	76	81	67	63	32	26	27	41	1,401*	52,464	2,573*		
1946.....	606	30	9	16	17	70	87	92	96	79	54	137	1,203*	1,285	31	50	92	60	82	58	29	34	22	18	33	1,794*	51,205	3,087*		
1945.....	24	10	6	13	32	92	120	97	79	66	40	101	680	170	38	52	60	83	48	48	27	45	11	11	14	607	50,453	1,287		
1944.....	61	16	16	51	74	110	103	71	77	55	26	97	757	176	48	63	75	73	44	37	35	29	22	11	10	620	51,556	1,377		
1943.....	Totals not comparable—data from one state lacking.																													

\* Not all schools reported.

TABLE V (Continued)

NUMBER OF SCHOOLS WITH PUPIL-TEACHER RATIO OF:													AVERAGE NUMBER CLASSES DAILY PER TEACHER						NUMBER OF PUPILS ENROLLED FOR FIVE OR MORE UNITS					PERCENT OF TOTAL ENROLLMENT IN EACH GRADE										
STATE													Less than 30		30 to 39		40 to 49		50 to 59		60 to 69		70 or more		9	10	11	12	Total	9	10	11	12	Total
0 to 14.0	14.1 to 16.0	16.1 to 18.0	18.1 to 20.0	20.1 to 22.0	22.1 to 24.0	24.1 to 26.0	26.1 to 28.0	28.1 to 30.0	Over 30	1	2	3	4	5	6	7	9	10	11	12	Total	2.2	6.6	11.7	15.2	8.2								
1. Arizona.....	7	3	5	9	9	5	6	1	1	0	0	0	7	23	13	3	126	388	569	619	1,702	2.2	6.6	11.7	15.2	8.2								
2. Arkansas.....	5	5	7	7	10	11	12	10	4	5	0	0	14	43	18	1	181	393	454	447	1,475	4.0	5.6	7.4	8.4	6.4								
3. Colorado.....	11	19	8	16	16	11	12	8	4	0	2	1	16	44	37	5	839	3,915	3,414	2,478	10,646	10.6	31.8	32.1	28.2	26.8								
4. Illinois.....	110	59	46	55	63	63	55	13	6	1	12	17	97	224	106	15	810	1,716	3,383	4,736	10,645	1.1	.2	4.6	7.5	3.6								
5. Indiana.....	14	11	16	22	37	32	22	5	2	0	1	4	26	95	31	4	1,017	2,581	2,477	2,371	8,446	4.	10.	11.	12.	9.								
6. Iowa.....	28	22	47	29	19	20	5	2	0	0	1	5	59	77	26	4	151	769	1,161	1,298	3,379	1.5	4.3	7.0	8.8	5.4								
7. Kansas.....	74	33	32	27	19	12	10	2	3	1	2	5	57	118	27	4	965	2,751	3,061	2,777	9,554	8.9	16.1	19.8	19.9	16.7								
8. Michigan.....	11	12	5	21	43	54	45	24	23	4	2	2	55	123	43	17	1,553	3,356	6,028	5,430	16,409	6.	6.	13.	14.	9.								
9. Minnesota.....	22	11	15	15	24	11	9	7	3	0	2	4	54	52	5	0	2,055	1,266	1,848	2,265	7,434	45.	6.	11.	15.	13.1								
10. Missouri.....	19	15	18	24	28	32	21	14	6	3	3	6	48	88	32	3	557	1,496	1,963	2,184	6,200	3.	5.9	9.1	10.2	7.1								
11. Montana.....	5	4	7	5	2	3	6	1	0	0	0	0	10	17	5	1	295	283	443	464	1,395	6.5	8.7	14.8	17.1	11.4								
12. Nebraska.....	18	23	40	20	21	10	10	7	2	0	1	2	38	74	28	8	161	561	1,215	1,227	3,164	1.5	4.7	10.3	12.4	7.1								
13. New Mexico.....	2	7	9	6	6	5	3	2	0	0	0	1	7	22	9	1	86	156	331	354	927	3.3	3.6	9.0	11.6	6.7								
14. North Dakota.....	4	5	4	12	12	10	8	4	2	1*	0	0	8	22	26	7	93	269	325	206	983	3.6	7.1	9.4	9.3	7.4								
15. Ohio.....	22	25	47	63	77	94	46	26	13	0	1	5	43	125	152	87	1,593	3,751	5,810	6,402	17,556	3.8	6.2	10.9	13.6	7.1								
16. Oklahoma.....	9	5	12	20	22	27	14	6	1	6	1	4	29	76	11	1	31	878	1,422	1,559	3,800	.5	6.	11.	14.	9.								
17. South Dakota.....	10	19	14	17	12	2	5	1	1	0	0	0	26	37	15	3	10	82	257	275	624	.2	1.7	5.	7.	3.6								
18. West Virginia.....	3	4	4	8	13	43	34	28	9	10	1	0	16	107	31	1	1,008	1,744	2,432	2,513	7,697	7.3	9.4	15.8	18.7	12.6								
19. Wisconsin.....	16	4	13	20	24	35	30	6	3	0	1	6	49	75	18	2	829	2,053	2,649	2,937	8,468	4.9	7.5	16.4	12.7	9.1								
20. Wyoming.....	6	4	4	5	6	6	1	0	0	0	1	0	5	17	8	1	34	174	381	396	985	1.5	7.0	16.1	19.3	10.8								
TOTALS, 1947..	396	290	353	401	463	486	354	167	83	31*	31	62	664	1,459	641	168	12,394	28,615	39,623	41,937	121,579	4.1	6.9	10.7	12.7	8.6								
1946..	380	258	331	383	462	452	394	226	106	33	22	59	570	1,505	640	209*	12,630	30,352	40,136	40,209	123,327	4.	7.1	11.2	13.4	8.3								
1945..	445	235	326	369	463	441	378	231	100	29	0	0	0	0	0	0	14,476	30,511	41,614	41,599	128,200	5.	7.	12.	14.0	9.								
1944..	441	1246	356	432	470	458	327	176	85	19	0	0	0	0	0	0	16,510	31,506	44,022	44,785	136,823	5.	8.	13.	16.	10.								
1943..	Totals not comparable—data from one state lacking.																																	

\* Not all schools reported.

TABLE V (Concluded)

STATE	NEW STAFF MEMBERS		DEGREES AND PROFESSIONAL TRAINING (NEW TEACHERS)										EXPERIENCE (NEW TEACHERS)														
			Men					Women					Men					Women									
	Men	Wom- en-	Total	PhD	MA	BA	No BA	Less than 15 hrs. Educ.	PhD	MA	BA	No BA	Less than 15 hrs. Educ.	Less than 1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 or more yrs.	Less than 1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 or more yrs.
1. Arizona.....	139	127	266	0	50	83	6	7	0	45	80	2	2	40	9	6	16	8	2	58	42	11	8	12	7	5	42
2. Arkansas.....	182	244	426	0	39	131	12	30	0	26	195	23	47	46	19	16	17	6	9	69	87	19	12	12	13	19	82
3. Colorado.....	321	296	617	0	74	222	25	39	0	33	240	23	29	109	39	31	23	17	14	88	101	28	27	30	16	10	84
4. Illinois.....	1,078	1,147	2,225	0	319	728	31	25	7	264	840	36	32	386	108	103	86	61	53	281	425	97	102	95	61	50	317
5. Indiana.....	587	414	1,001	8	172	401	6	2	1	62	348	3	1	197	37	48	39	26	20	220	126	34	44	33	25	14	138
6. Iowa.....	494	472	966	1	104	385	4	30	0	57	405	10	34	127	54	40	45	37	21	170	148	35	54	25	36	29	145
7. Kansas.....	568	527	1,095	3	121	424	20	19	0	63	439	25	22	146	51	56	50	44	34	187	145	51	54	52	23	19	183
8. Michigan.....	653	830	1,483	8	196	435	14	15	1	131	677	21	27	221	65	56	53	41	25	192	202	78	76	60	35	33	256
9. Minnesota.....	398	432	830	0	90	293	15	7	0	41	384	7	9	86	33	35	37	27	19	161	99	24	47	83	32	23	169
10. Missouri.....	466	492	958	4	149	294	19	21	1	94	374	23	15	130	47	47	36	32	16	158	158	34	36	35	32	26	171
11. Montana.....	106	107	213	0	14	80	12	13	0	16	86	5	6	23	10	4	11	7	5	46	13	9	18	10	11	8	38
12. Nebraska.....	336	337	673	1	75	249	11	19	0	42	277	18	18	104	37	27	24	24	14	106	106	36	19	21	25	16	114
13. New Mexico.....	126	124	250	0	25	96	5	10	0	20	103	1	5	30	16	10	14	5	6	45	22	7	13	16	9	11	46
14. North Dakota.....	108	134	242	2	13	92	1	0	0	9	117	8	0	37	17	15	6	4	3	26	32	20	17	12	8	4	41
15. Ohio.....	1,182	987	2,169	3	282	848	49	29	0	162	786	39	25	313	92	85	65	66	81	480	324	84	81	56	47	59	336
16. Oklahoma.....	336	337	673	3	108	215	10	17	1	75	253	8	11	58	27	16	31	25	31	148	74	30	26	27	34	24	122
17. South Dakota.....	154	171	325	0	33	112	9	1	0	7	149	15	2	45	16	18	15	14	3	43	57	18	26	16	13	8	33
18. West Virginia.....	379	350	729	0	89	268	22	26	0	37	276	37	29	169	31	22	14	19	24	100	152	43	29	24	17	12	73
19. Wisconsin.....	544	535	1,079	3	145	390	6	12	2	62	407	4	8	211	43	45	37	39	24	145	201	49	49	42	26	18	150
20. Wyoming.....	77	86	163	2	14	56	5	7	0	9	72	5	5	20	8	9	6	3	7	24	26	8	11	4	7	3	27
TOTALS, 1947..	8,234	8,149	16,383	38	2,112	5,802	282	329	13	1,255	6,568	313	327	2,498	759	689	625	595	411	2,747	2,630	715	749	620	477	391	2,567
1946..	5,330	8,662	13,992*	47	1,568	3,360	355	318	20	1,290	6,800	462	334	1,104	344	341	341	305	289	2,606	2,847	812	784	641	478	389	2,711
1945..	4,596	8,809	13,405	58	1,443	2,738	352	276	22	1,419	6,846	527	333	814	314	295	307	243	212	2,352	2,680	861	849	642	440	416	2,846
1944..	5,271	10,292	15,563	40	6,111	3,234	386	340	29	1,600	8,150	513	410	1,017	368	361	326	253	304	2,621	3,287	1,084	886	600	540	529	3,254
1943..	Totals not comparable—data from one state lacking.																										

\* Not all schools reported.



## BOOK REVIEWS

*Men Who Control Our Universities*, by Hubert Park Beck. New York: Morningside Press, 1947. Pp. viii + 229.

A university is still regarded to be a community of scholars. But the medieval idea that the administration of a university is either a privilege or a duty of the members of the academic community has long since disappeared, at least in American universities. The ultimate responsibility for overseeing and managing centers of higher learning generally rests with a legally constituted board. As our universities have grown in size and complexity, the problems of management have become more and more complicated. Aims have had to be redefined to keep higher education abreast of changing social needs; curricula have had to be revised to serve new aims; new schools and new curricula have demanded consideration; conditions of faculty service—salaries, teaching loads, tenure, retirement—have had to be reviewed and improved; new teaching methods demanding special kinds of space and equipment have been developed; enormous building programs have had to be planned and financed to accommodate the ever-growing body of students and professors; large financial resources have had to be accumulated and managed to provide both for capital outlay and stable income. In the final analysis all of these responsibilities and many others that might be added rest squarely on the shoulders of the boards of trustees. In their hands is the power to promote or restrain growth; to determine the balance between the professional and technical program on the one hand, and the arts and sciences on the other; to decide on the relative emphasis that shall be placed on research and on undergraduate instruction; to give priority to athletics or to scholarship. True, many boards—most of them in fact—very wisely delegate large responsibilities for the educational program to the faculty under the jurisdiction of the president. The fact remains, nevertheless, that boards of trustees have diverse and enormously important responsibilities.

What type of men (I say "men" advisedly for there are virtually no women on the boards) are selected to assume these responsibilities? The most comprehensive answer that has thus far been given is provided by Hubert Park Beck in *Men Who Control Our Universities*. He selected the thirty universities that comprised the membership of the Association of American Universities in 1934-35; compiled a roster of their board

members as of that date, a total of 734; then gathered from various sources, including the board members themselves, a variety of data about each individual. These data included occupation, income, business offices held, age, sex, residence, region of birth, method of appointment, and length of service.

The author relates his data to those of other studies embodying comparable facts. In his final chapter he gives what is admittedly a subjective evaluation of the present status and characteristics of the members of university boards of trustees in terms of criteria derived from the writings of leading authorities on higher education.

The study is well organized and clearly presented. To abstract major conclusions from what is already a concise summary will give only a partial and incomplete idea of the techniques employed in the study and of its broader implications. It may be in point, nevertheless, to restate a few of the major conclusions. Practically 90 percent of the trustees had been college students and, therefore, had some first-hand knowledge of the educational processes in colleges and universities. Slightly more than half were alumni of institutions of whose boards they were members. There is nothing in the study, however, to indicate what the attitude of the trustees is on educational matters or what their particular interests in education may be. It is significant that of the 734 trustees included in the study only 10 percent were educators of any type, while 71 percent were individuals of prominence in the business field. The author points out also that 47 percent of these trustees were sixty years of age or over, and 18 percent were seventy or over. It was found that only 3.4 percent of the trustees of the universities included in the study were women. Even though twenty-eight of the universities were coeducational, only twelve of the governing boards had women as members. By far the larger percentage of the trustees came from metropolitan areas. There is a conspicuous absence of representation from the rural population and from labor. In general, the membership of private university boards is more largely representative of large-scale business, finance, wealth, and high social position than is the membership of the boards of public institutions. The author concludes that "The biases apparent in the selection of trustees probably should be thought of as reflecting the basic patterns of status, power, and values that characterize contemporary American society." The author undertakes an

objective appraisal of the advantages and disadvantages of the present composition of boards of trustees and suggests certain modifications which he believes would be desirable.

No attempt was made in this study to appraise the actual operation of boards of trustees as might be indicated by regularity of attendance at board meetings, actions taken and policies adopted as shown by the minutes of board meetings, or the relationship of board members to the administration and the faculty of their institutions. An extension of the study along these lines would be of considerable significance for the information both of board members generally and of the constituents of the institutions which the boards serve.

As a description of the status of board members this study will be of interest not only to the boards themselves, but to administrative officers and to the general public.

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*Integrating High School and College*  
by Leonard V. Koos. New York:  
Harper & Brothers, 1946. Pp. 208.

The sub-title employed by Dr. Koos, *The Six-Four-Four Plan At Work*, summarizes the thesis advocated by the author, who is, perhaps, the greatest authority on the Junior College movement. The educational organization plan which he advocates is a system including a six-year elementary school, a four-year junior high school, and a third unit, also of four years, consisting of the eleventh, twelfth, thirteenth, and fourteenth grades and designated as the "junior college." The book presents objective and subjective evidence in support of the two four-year units, particularly the "junior college" unit.

The author traces the history of the 6-4-4 plan from its advocacy forty years ago by George A. Merrill through the first schools of this type established about twenty years ago. The first public school system to adopt the 6-4-4 plan was Pasadena, California, and the author devotes much space in his book to a detailed description of the Pasadena "New American College" (cf. *The New American College*, Sexson and Harbeson, reviewed in April, 1947, issue of the *QUARTERLY*). A study made by the author in 1941 revealed that there were ten systems using the 6-4-4 plan of organization. The author visited all ten 6-4-4 systems, seventeen separate two-year public junior colleges, and twenty-six association (high school-junior college combination, each separate) public junior colleges, and on the basis of these visits presents evidence to prove his contention that the 6-4-4 plan is best.

Most of the book is devoted to the results of the investigations conducted on these visits. The author cites the preferences and the opinions of administrators visited as favoring the 6-4-4 plan. The principal reasons for preference were vertical integration of the curriculum, stability through longer program, continuous guidance, and economy through cooperative use of facilities and staff.

The reasons given in favor of the four-year junior high school over the traditional three-year junior high school were breadth of program, enriched extracurriculum, maturity of pupil leadership, and preparation and merit of staffs.

The case for the four-year college is based on the claim of a better curriculum, improved organization and effectiveness of guidance, better trained faculty, more effective administration, and more desirable material facilities.

The author describes in detail the curriculum offerings of the four-year junior college in Pasadena and of the College of The University of Chicago. Advantages claimed for this type curriculum are vertical integration, greater proportions of commendable sequences, and larger proportions of courses taken out of level (across the line separating high school and junior college).

The improved organization and effectiveness of guidance in the 6-4-4 plan is credited with retention of students into the second college year and of distribution of students to terminal curriculums. Student participation in junior college organizations was found to be greatest in the four-year schools.

The instructors in the four-year junior colleges were in general found to be better trained and better assigned than instructors in other types of junior colleges. Teaching assignments in the four-year junior colleges were usually on the dual level within one department, and the instructors were not required to teach subjects for which they were inadequately prepared.

Economy of administration is claimed for the four-year junior college because usually there is only one administrative officer responsible for both the high school and the junior college levels. This leads to closer integration of the high school and the junior college years and also effects a savings in the cost of administration.

The last advantage claimed for the four-year junior college is more desirable material facilities (special rooms, laboratories, etc.). It was found that the four-year junior colleges enjoyed a larger number of general and specialized facilities than were found in other types of junior colleges, and that their libraries were better staffed and more completely equipped.

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*A History of Problems of Education* by John S. Brubacher. New York: McGraw-Hill Book Company, Inc., 1947. Pp. xiii+688.

The reviewer's students seemed pleased to learn that the textbook they were to use in history of education was organized around nineteen contemporary problems. It was clear that they were happily anticipating the study of a text which would not impose the traditional chronological approach upon them. They were intrigued with the idea of reading only one chapter about "methods of Instruction," to find out what methods ancient civilizations had used, what changes in techniques mediaeval and Renaissance scholars had advocated, and how modern educators have thought about teaching procedures.

This pleased attitude turned to a feeling of some bewilderment as the first weeks of the semester passed. The students complained that a chapter entitled "Curriculum," or "Religious and Moral Education," or "Nationalism in Education" devoted so few paragraphs or pages to a problem for each of several societies that only a superficial understanding of the place of a particular educational institution in a particular society could be obtained. Volumes organized chronologically proved unsatisfactory for supplementary study since a reading of an entire text was necessary before a knowledge of the social and economic background of the first problem discussed could be obtained. The instructor found it more than usually difficult, in the time available and in relation to limited information about a society which students had obtained from the text, sufficiently to supplement the text's brief statements about such educational problems as "Philosophy of Education," or "Educational Psychology," or "Nationalism in Education," to make each one meaningful for any time or place.

In spite of early discouragement the hope was held that a chronological approach to problems such as "Educational Aims," "Politics and Education," and "Economic Influences on Education," in turn and for successive societies, would result not only in an appreciation of the historical development of "Elementary Education," "Secondary Education," and "Religious and Moral Education," but would also build an understanding of the total educational problem in Athens, Rome, Florence, Paris, and New York. By mid-semester this result had been so well achieved that the initial mood of optimism had returned. Later chapters which traced the evolution of "Formal and Informal Education," "Higher Education," "Professional Education of Teachers" and "Public and Private Education"

from ancient to modern times, in successive chapters, were read with relative ease and understanding, as well as with a satisfaction which seemed to result from the pursuit of each problem to its contemporary setting.

In a discussion of this experience, however, students and instructor have agreed that some of the early confusion might be avoided if a preliminary statement of the usual chronological type were to be included in the book, or presented at some length by the instructor.

The unusual organization of this volume makes it a different and more useful professional tool in certain respects than the text written around historical epochs. The teacher or administrator who wishes to improve practice by a comparison of his aims and procedures with those of educators in earlier and modern societies will find it easy to obtain pertinent ideas about his problem from this book. The speaker or writer who wishes to sketch the historical background of "Educational Administration and Supervision" or "The School and Progress" in a few paragraphs can easily obtain the required material here.

The text offers ever guarantee of sound scholarship. There is an excellent bibliographical commentary. A few meaningful themes hold the center of interest in each chapter. In Chapter IV, "Economic Influences on Education," for example, such themes are that schooling is the product of a surplus economy and that different social classes have demanded quite different types of schools for their children. In this, as in many other respects, it is superior to older books in the field which were so often little more than chronologies.

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*State Programs for the Improvement of Teacher Education*, by Charles E. Prall. Washington: American Council on Education, 1946. Pp. xii+379.

Apart from the eternal question of why the schools are failing to arrest the decay of adult and juvenile morals, there is perhaps no subject more widely and fervently debated in our collegiate circles at the present time than how to prepare teachers for their calling.

It is timely to consider this question nowadays, while the American educational world is astir with ferment and when perhaps a new page in the history of the preparation of American school teachers is about to be turned. Timely, too, is the appearance of Dr. Prall's book on *State Programs for the Improvement of Teacher Education*, which probes penetratingly and illuminatingly into the matter.

In America teacher education is not centrally



managed. If it may be said to be managed at all the management is done by consensus, a better method than resorting to central authority. The sprawling apparatus devised by American society for the preparation of teachers is ramified and diverse, but the state is nevertheless the main turning point for the support of teacher education and through its performance of the functions of certification and otherwise it is central even though not dominating in matters of decision and action. It is from the viewpoint of the state, therefore, that Dr. Prall has taken his bearings and viewed many of the experimental and tentative ventures now going forward in this field.

*State Programs for the Improvement of Teacher Education* is written compactly, clearly, vigorously, and at times with conspicuous restraint. Dr. Prall is fully appreciative of the fact that there are unresting forces at work to mend matters and yet at the same time he is conscious of hindrances to progress that are existent and perhaps implicit in this most conservative field of educational effort. Tradition itself is *ipso facto* inert and can be very stubborn, and there is indeed plenty of tradition, good and bad, in teacher education.

Concerning the difficulty of introducing new ideas into the operations of our more prestigious

institutions of higher learning, Prall observes: "In strongholds of individual belief and philosophy, these are matters of slow growth." In educational parlance we occasionally pay our respects to "sound graduate study," but Dr. Prall does not like clichés, and on this subject he observes: "Over the country as a whole there is nothing quite so variable in the academic realm as the way in which the master's degree is earned." Concerning the certification codes adopted by state education authorities, so frequently narrow and stultifying in their character, he says: "Far from expediting teacher growth on the job and supplying incentives for sound professional development, certain elements in the certification code of almost any state appear even to interfere with such ends."

Let the reader not suppose that Dr. Prall's book is wholly interpretive. It is a mine of information as well. Detailed treatment is given to many programs, in particular those in New York, West Virginia, Michigan, Alabama, Florida, Kentucky, Georgia, state and institutional programs alike.

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## PUBLICATIONS OF THE NORTH CENTRAL ASSOCIATION<sup>1</sup>

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    1. *Sprouting Your Wings*, by Bruce H. Guild
  - D. Pamphlets produced as outgrowths of committee studies and projects. Distributed from the office of Secretary G. W. Rosenlof, University of Nebraska, Lincoln, Nebraska
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    2. Better Colleges, Better Teachers, The Macmillan Co. New York
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- III. Publications of the Commission on Secondary Schools. Distributed free to members of the Commission and member schools
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  - A. *Evaluation of Higher Institutions*, Vols. 1-7. Chicago: University of Chicago Press
    1. *Principles of Accrediting Higher Institutions*, by GEORGE F. ZOOK and M. E. HAGGERTY, 1936. Pp. 202. \$2.00
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  - B. *Revised Manual of Accrediting*, July 1941; including later revised pages. Available from office of Norman Burns, Secretary of the Commission on Colleges and Universities, University of Chicago, 5835 Kimbark Ave., Chicago 37, Illinois. \$3.00.
  - C. *Home Economics in Liberal Arts Colleges*, by CLARA M. BROWN. Published 1943, under joint sponsorship with the American Home Economics Association. \$1.00

<sup>1</sup> Unless otherwise indicated, address communications to the Executive Secretary, North Central Association of Colleges and Secondary Schools, Administration Building, University of Nebraska, Lincoln, Nebraska.

D. Reprints from the NORTH CENTRAL ASSOCIATION QUARTERLY and other pamphlets available in limited numbers at the office of the Secretary of the Commission on Colleges and universities without cost

1. "Statement of Policy Relative to the Accrediting of Higher Institutions, Operation of the Accrediting Procedure," July 1, 1941
2. Annual list of institutions of higher education accredited by the Commission on Colleges and Universities
3. "Periodicals for the College Library," prepared for the Committee on Revision of Standards by DOUGLAS WAPLES
4. "Changes in Enrollments over a Fifteen-year Period in Institutions Accredited for 1936-37 by the North Central Association," by WM. J. HAGGERTY and GEO. A. WORKS
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13. "The Offerings and Facilities in the Natural Sciences in the Liberal Arts Colleges," by ANTON J. CARLSON
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V. Publications jointly sponsored by the North Central Association and other educational organizations or agencies

A. *A Guide to the Evaluation of Educational Experiences in the Armed Services*. Published in 1944, in cooperation with the American Council on Education and eighteen other accrediting and standardizing educational associations. Looseleaf. Order from G. P. Tuttle, 363 Administration Building (W), Urbana, Illinois. \$3.00

B. Publications of Cooperative Study of Secondary School Standards. Available from 744 Jackson Place, Washington, D. C.

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2. *Evaluation of Secondary Schools: Supplementary Reprints*, \$1.50
3. *How to Evaluate a Secondary School* (1940 edition), cloth \$1.25; paper, \$0.90
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VI. *A History of the North Central Association*, by CALVIN O. DAVIS, 1945. Pp. xvii+286, \$2.00 plus postage.



